AIDS 2024

Conference report

International AIDS Society

aids2024.org

IAS

Sponsors, donors and media partners

Major industry sponsors

GILEAD | HIV

MSD

ViiV Healthcare

Corporate sponsors

Gold

Abbott

Silver

AUROBINDO Committed to healthier life!

Chevron

HETERO

URC

Bronze

abbvie

SHIONOGI

Donors

anrs Inserm

Bayerisches Staatsministerium für Gesundheit und Pflege

BILL & MELINDA GATES foundation

Public Health Agency of Canada

Agence de la santé publique du Canada

simply MUNICH

THE GLOBAL FUND

NIH National Institutes of Health

UNAIDS

UNDP

ViiV POSITIVE ACTION

World Health Organization

Civil society partners

GATE

4Plus Jahre Münchner Aids-Hilfe e.V.

COSWA

prevention access campaign

GLOBAL NETWORK OF YOUNG PEOPLE LIVING WITH HIV

GNP+ GLOBAL NETWORK OF PEOPLE LIVING WITH HIV

ICW

Other partners

HIV SCIENCE AS ART MUNICH

Deutsche Aidshilfe

DAIG Deutsche AIDS-Gesellschaft e.V.

PEPFAR

Wordly AI Translation & Captions

Media partners

POZ HEALTH, LIFE & HIV

CCO powered by cea

THE LANCET

JIAS JOURNAL OF THE INTERNATIONAL AIDS SOCIETY

HIV & more

FUNDACIÓN HUÉSPED PREVENCIÓN·CIENCIA·DERECHOS

CNS

VIRUS OFF

+Life

TheBodyPro

TAGESSPIEGEL

HORNET

Contents

Acronyms and abbreviations

1HP	One-month isoniazid and rifapentine regimen
3HP	Three-month isoniazid and rifapentine regimen
aHR	Adjusted hazard ratio
AIDS 2024	25th International AIDS Conference
AMP	Antibody-Mediated Protection
ART	Antiretroviral therapy
B/F/TAF	Bictegravir/emtricitabine/tenofovir alafenamide fumarate
bNAbs	Broadly neutralizing antibodies
CAB	Cabotegravir
CAB-LA	Cabotegravir long-acting
COVID-19	Coronavirus disease 2019
CrAg	Cryptococcal antigen
CRISPR	Clustered Regularly Interspaced Short Palindromic Repeats
DTG	Dolutegravir
F/TAF	Emtricitabine/tenofovir alafenamide fumarate
F/TDF	Emtricitabine/tenofovir disoproxil fumarate
HBV	Hepatitis B virus
HPTN	HIV Prevention Trials Network
hrHPV	High-risk human papillomavirus
HSIL	High-grade squamous intraepithelial lesion
HVTN	HIV Vaccine Trials Network
IAS	International AIDS Society
IAS 2023	12th IAS Conference on HIV Science
IANS	International Anal Neoplasia Society
LEN	Lenacapavir
LEVI	Long-acting early viral inhibition
NAAT	Nucleic acid amplification testing
OAT	Opioid agonist treatment
PEP	Post-exposure prophylaxis
PEPFAR	US President's Emergency Plan for AIDS Relief
PrEP	Pre-exposure prophylaxis
PYs	Person-years
STI	Sexually transmitted infection
TAF	Tenofovir alafenamide fumarate
TDF	Tenofovir disoproxil fumarate
UNAIDS	Joint United Nations Programme on HIV/AIDS
U=U	Undetectable equals untransmittable
WHO	World Health Organization

Terminology

Key populations refers to gay men and other men who have sex with men, people who inject drugs, people in prisons and other closed settings, sex workers and their clients, and trans people.

Vulnerable populations refers to people living with HIV and groups outside of key populations who may be at increased vulnerability to acquiring HIV, for example, adolescents, Indigenous peoples, migrants, refugees, internally displaced persons, people with disabilities, people in prisons and other closed settings, people of advanced age, women and girls.

AIDS 2024 at a glance

AIDS 2024 attracted **10,696 participants** from **169 countries**.

93% of participants attended AIDS 2024 in person.

Just **over one in four** participants (26%) came from central, eastern, southern and western Africa and **48%** came from low- and middle-income countries.

AIDS 2024 awarded **865** in-person and virtual scholarships to participants from **141** countries. 44% of scholarships were awarded to people in central, eastern, southern and western Africa.

Just under half (**49%**) of participants in AIDS 2024 were aged **45** years or younger.

Overall, **88%** of delegates agreed that the conference objectives were met.

AIDS 2024 generated over **650** original news stories.

Introduction

AIDS 2024, the 25th International AIDS Conference, took place in Munich, Germany, and virtually, on 22-26 July 2024, with over 10,000 participants.

At AIDS 2024, delegates heard that six-monthly injections of lenacapavir gave 100% protection against HIV acquisition in cisgender women in the PURPOSE-1 study. Delegates gave the PURPOSE-1 study team a standing ovation, recognizing a major advance in HIV prevention.

During AIDS 2024, three people known to have been cured of HIV shared their stories to inspire continued research. The conference learnt of the "next Berlin patient", who appears to be the seventh person cured of HIV; this 60-year-old man has been in HIV remission for over five years after a stem cell transplant. Notably, his donor had a single CCR5-delta32 mutation, which could offer insights for future HIV cure strategies using gene therapy.

At the conference opening ceremony, German Chancellor Olaf Scholz reaffirmed Germany's commitment to the HIV response, joining a global initiative to eliminate HIV-related stigma. And the host city, Munich, became a Fast Track City. Also, over 370 MPs from 45 countries united to strengthen political support for ending HIV transmissions through the Global Parliamentary Platform on HIV and AIDS.

The conference featured 40 oral abstract sessions organized into six tracks. The 50 invited-speaker sessions included five plenaries, four special sessions and 41 symposia. Twenty-two workshops, 17 pre-conferences and 115 satellite sessions complemented the invited-speaker and abstract-driven programme.

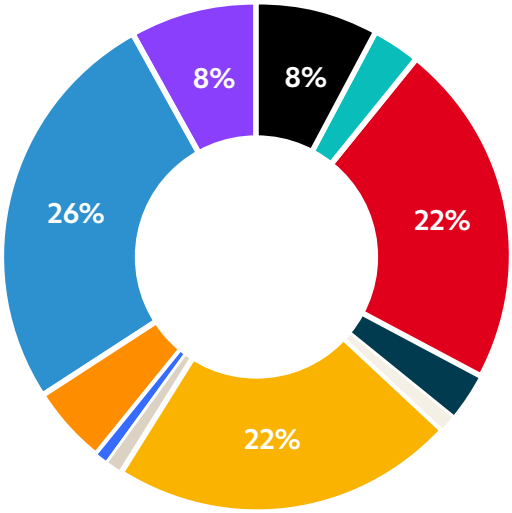
A total of 7,260 abstracts were submitted to AIDS 2024, including 581 late-breaker abstracts. Ultimately, 2,772 abstracts were selected for presentation in sessions and the poster exhibition – an acceptance rate of 38%.

Who was there?

AIDS 2024 had 10,696 participants: 8% of participants were scholarship recipients, and 7% of participants had virtual registrations, allowing them to view live sessions, ask questions and network with other delegates online.

Country and region

Central, eastern, southern and western Africa was the region with the highest representation at AIDS 2024, making up 26% of delegates. North America and western and central Europe each contributed 22%, while 8% of delegates came from South and Southeast Asia.

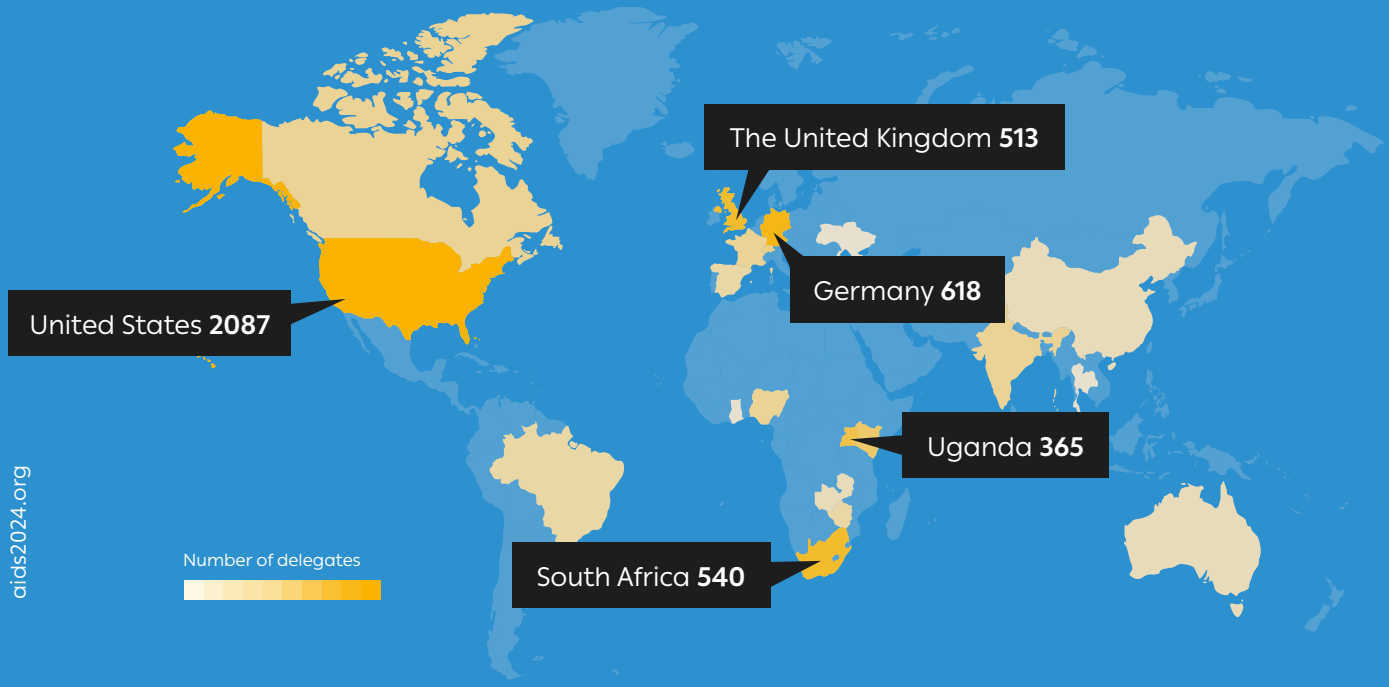


Delegates by region

- Central, eastern, southern & western Africa **26%**
- Western & Central Europe **22%**
- North America **22%**
- South & Southeast Asia **8%**
- Unspecific **8%**
- Latin America **5%**
- East Asia **3%**
- Eastern Europe & central Asia **3%**
- Caribbean **1%**
- Oceania **1%**
- Middle East & North Africa **1%**

A total of 169 countries were represented at AIDS 2024. The United States (2,087 participants), Germany (618 participants), South Africa (540 participants) and the United Kingdom (513) had the largest representation at the conference.

Top 20 countries represented at AIDS 2024

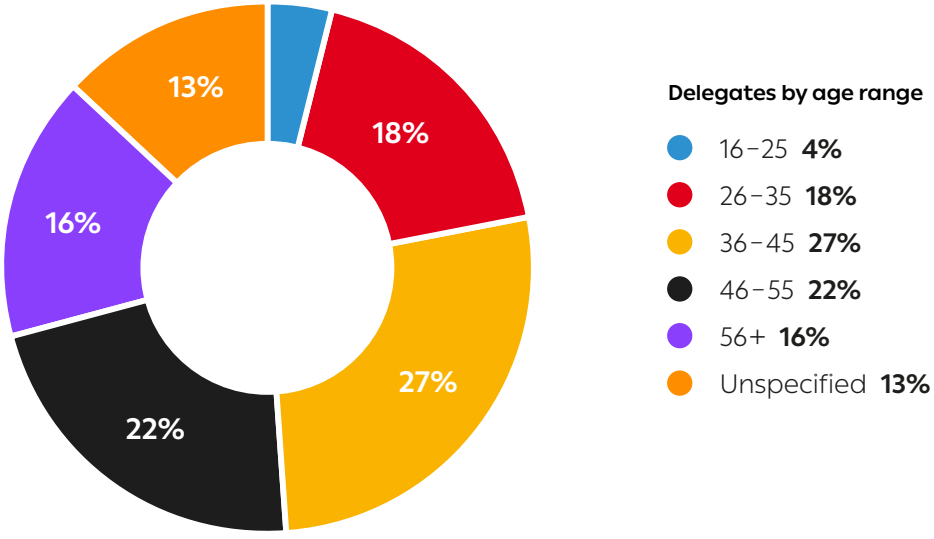


Gender

Overall, 45% of participants were female, 40% male and 1% were non-binary or gender non-conforming; 1% of participants said their gender differed from sex assigned at birth and 14% did not specify their gender.

Delegates by age range

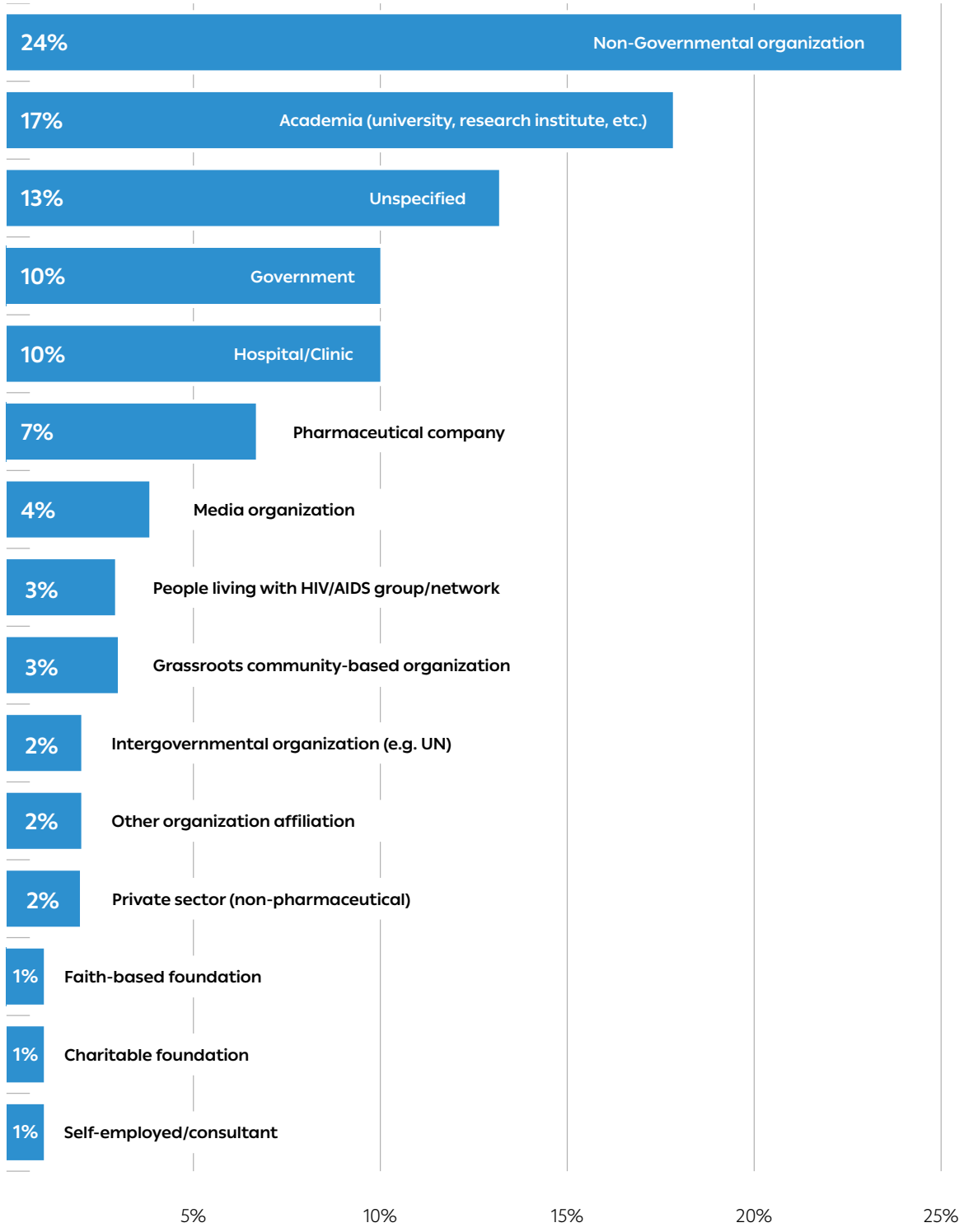
Just under half (49%) of AIDS 2024 participants were under 46 years and 4% were younger than 26 years.



Affiliations and institutions

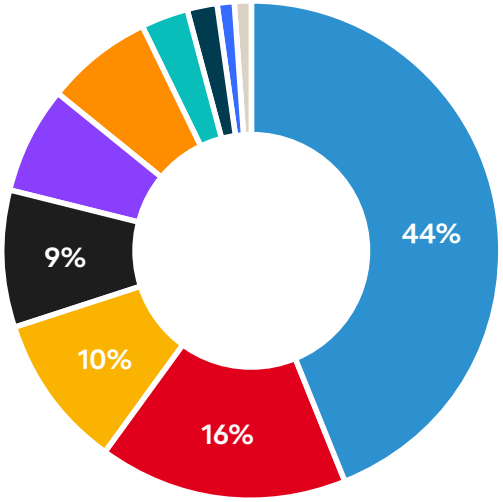
People working in non-governmental organizations (24%, 2,531 participants) and in academia (17%, 1,850 participants) made up the largest share of participants in AIDS 2024.

Organizational affiliation



Scholarships awards

AIDS 2024 awarded a total of 865 scholarships (739 in-person scholarships and 126 virtual scholarships) to delegates from 141 countries (430 submission-based scholarship awards, 308 non-submission-based scholarship awards, 106 IAS Educational Fund awards and 21 media scholarship awards). Scholarship recipients were most commonly from central, eastern, southern and western Africa (44%), South and Southeast Asia (16%) and North America (10%).

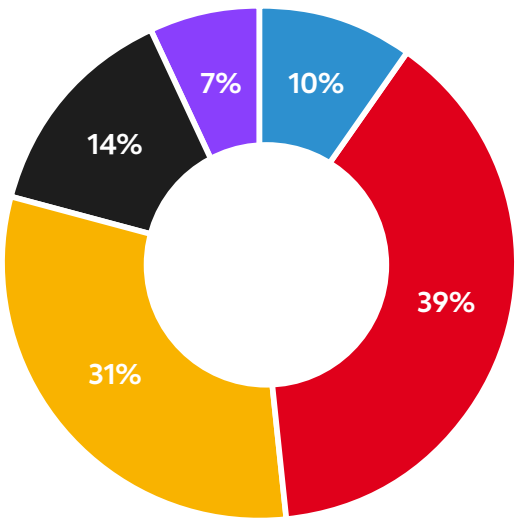


Scholarship recipients by region

- Central, Eastern, Southern & Western Africa **44%**
- South & Southeast Asia **16%**
- North America **10%**
- Latin America **9%**
- Western & central Europe **7%**
- Eastern Europe & Central Asia **7%**
- Caribbean **3%**
- Middle East & North Africa **2%**
- East Asia **1%**
- Oceania **1%**

Overall, 50% of scholarship recipients were female, 44% were male, 5% were non-binary or gender non-conforming, 1% defined their gender as "other not listed", and 8% identified with a different gender than their sex at birth.

Just under half of scholarship recipients (49%) were younger than 36 years.



Scholarship recipients by age

- Under 26 **10%**
- 27–35 **39%**
- 36–45 **31%**
- 46–55 **14%**
- 56+ **7%**

What was shared?

Global targets, financing and sustainability

At AIDS 2024, UNAIDS shared data highlighting uneven progress in reducing HIV acquisitions [1]. Between 2010 and 2023, new HIV acquisitions fell by 39% globally and by 56% in central, eastern, southern and western Africa. But the report showed that 1.3 million people acquired HIV in 2023 – more than three times the 2025 target of 370,000, and the same number as in 2022.

The number of people acquiring HIV is still rising in eastern Europe and central Asia, Latin America and the Middle East and North Africa. About 630,000 people died from AIDS-related illnesses worldwide in 2023 – a death every minute and more than double the 2025 target of 250,000. UNAIDS reported that the world is not on track to achieve the 2030 target of 95% of people living with HIV diagnosed, 95% of those diagnosed on treatment, and 95% of people with HIV on treatment virally suppressed. Current progress stands at 86-89-93. Although 30.7 million people were taking life-saving antiretroviral treatment in 2023, around 9.3 million were still untreated.

Standing still by maintaining 2020 levels of HIV-related services and failing to reach the 95-95-95 targets will result in 34.9 million new acquisitions and 17.7 million AIDS-related deaths from 2021 to 2050, according to modelling presented by UNAIDS [2]. The estimated economic cost of inaction will be almost USD 8,300 per person in low- and middle-income countries by 2050.

One of the biggest obstacles to realizing the vision of ending the HIV pandemic as a threat to public health and individual well-being by 2030 is a fall-off in funding. UNAIDS points to international resources for HIV in 2023 being almost 20% lower than at their peak in 2013 [3]. It says the USD 19.8 billion available for HIV programmes in low- and middle-income countries in 2023 is almost USD 9.5 billion short of the amount needed in 2025.

German Chancellor Olaf Scholz reaffirmed Germany's strong commitment to the HIV response and announced at the opening session that Germany had become the 39th signatory to the Global Partnership for Action to Eliminate all Forms of HIV-Related Stigma and Discrimination by 2030. Before the conference, the Mayor of Munich called on the state of Bavaria to make drug consumption rooms legal, and Munich became a Fast Track City on the conference opening day.

Over 370 Members of Parliament from over 45 countries united to put people first in rebuilding political support for ending HIV transmissions as part of the Global Parliamentary Platform on HIV and AIDS founding declaration [4]. MPs from Argentina, Germany, the United Kingdom and Zimbabwe gathered to address the waning political commitment to the HIV response.

HIV cure and remission

At AIDS 2024, German researchers presented details of the second case of HIV remission after a stem cell transplant from a non-CCR5 delta32 homozygous donor [5]. (The first case was presented at IAS 2023[6] .) The "next Berlin patient" is a 60-year-old man who was diagnosed with acute myeloid leukaemia and received an allogeneic hematopoietic stem cell transplant from a heterozygous CCR5 wild-type/delta32 donor. HIV uses the CCR5 receptor to gain entry to a CD4 cell. The CCR5 delta-32 mutation prevents expression of the CCR5 receptor. A heterozygous donor has one copy of the CCR5 delta 32 mutation, which confers slower HIV progression but no protection against HIV acquisition. A homozygous donor has two copies of the CCR5 delta 32 mutation and is almost entirely protected against HIV acquisition. In the "next Berlin patient", the stem cell transplant led to full donor chimerism and leukaemia remission. Antiretroviral treatment began before transplantation and HIV-1 RNA was undetectable (<20 copies/ml) until an analytical treatment interruption in September 2018.

After 5.5 years of follow up, HIV-1 DNA is undetectable in peripheral blood mononuclear cells, duodenal and ileal biopsy samples, and no viral outgrowth has been detected in stimulated CD4+ T-cells. Therapeutic drug monitoring at four time points since 2018 found that raltegravir was undetectable. HIV-specific antibody levels had declined since treatment interruption and HIV-specific T-cell responses had been undetectable since transplant. Until this point, all stem cell transplants from CCR5-delta32 heterozygous donors had resulted in HIV viral rebound within a short period.

> **"This is promising for future HIV cure strategies based on gene therapy, because it suggests that we don't have to eliminate every single piece of CCR5 to achieve remission."**
>
> **Sharon Lewin, AIDS 2024 Co-Chair [7]**

The conference heard updates on several approaches designed to cure HIV, including the inhibition of HIV transcription and gene therapy to eliminate HIV [8, 9]. A Phase 1 study presented at AIDS 2024 showed that excising the latent proviral HIV genome using AAV9 multiplex CRISPR-SaCas9 was safe and did not result in off-target DNA damage. The study administered EBT-101 to six participants with suppressed HIV on antiretroviral treatment who underwent analytical treatment interruption. One participant experienced delayed viral rebound at 16 weeks after treatment interruption and a reduced viral reservoir [10].

A symposium on gene therapy for HIV cure and remission struck a note of caution about the feasibility and safety of gene editing using CRISPR Cas technology [11]. Although CRISPR Cas might be suitable for editing cells containing integrated HIV provirus, multiple rounds of editing are likely to be necessary to remove all functional proviruses. Analysis of chromosomes after CRISPR Cas editing has shown that, as well as removing proviral sequences, editing also removes surrounding cellular DNA. These unintended large chromosomal deletions may lead to loss of cellular function, activation of oncogenes or deletion of tumour-suppressor genes, eventually resulting in malignancy. Speakers agreed that long-term follow up will be critical in assessing the safety of gene editing in HIV cure research and recommended that greater efforts be made to ensure that follow up takes place, that follow-up data is shared with the scientific community and that these processes are adequately funded.

The design of HIV cure and remission studies will also be informed by an understanding of factors associated with virologic rebound during analytic treatment interruption. A meta-analysis of factors associated with time to detectable viremia and loss of virologic control in six studies of analytic treatment interruptions showed that measures of HIV reservoir size were associated with a shorter time to detectable viremia (pre-ATI HIV-1 DNA >850 copies and intact proviral DNA >70 copies per 106 CD4+ T-cells) [12]. Time to loss of virologic control (restarting ART or two consecutive HIV-1 RNA measurements of 5,000 copies/ml or above) was associated with treatment with the broadly neutralizing antibody (bNAb), 3BNC117, at the time of ART initiation in individuals with 3BNC117-sensitive virus.

HIV vaccines

A plenary presentation outlined the reasons for cautious optimism regarding HIV vaccine development despite the failure of almost all previous candidate vaccines to demonstrate protective efficacy [13]. The AMP studies (HVTN 704/HPTN 085) showed that the bNAb, VRC01, administered by infusion protected against the acquisition of HIV sensitive to VRC-01 [14]. Efforts to elicit neutralizing antibodies against HIV by vaccination have focused on germline targeting of B-cells. When B-cells first recognize a novel pathogen, they produce antibodies that bind weakly to the pathogen: so-called germline antibodies.

Over time, these B-cells evolve and produce antibodies that bind more tightly to the pathogen, improving their capacity to prevent the pathogen from infecting the target cell. Germline targeting seeks to identify the B-cells with the intrinsic capacity to mature into bNAb-producing B-cells and the immunogens that will best promote maturation. A vaccine is more likely to be effective when it elicits bNAbs against multiple conserved sites on the HIV envelope, at high and sustained concentrations. Research efforts have focused on three immunogens (eOD-GT8, BG505 GT1.1 SOSIP and 426c core 7mer), each of which has demonstrated success in inducing memory B-cells or eliciting bNAbs.

The HVTN 135 study evaluated vaccine bNAb induction in neonates (<5 days old) born to mothers living with HIV. Preliminary results of the HVTN 135 trial presented at AIDS 2024 showed that infants who received CH505TF had B-cell responses to the immunogen comparable with adults in the HVTN 115 study; neutralizing antibody titres were 10 times higher than those in adults [15]. A Phase 1 placebo-controlled dose-ranging study of the germline-targeting trimer, GT1.1, in 47 people showed robust antigen-specific memory B-cell responses, including those that have bNAb characteristics, in those who received the GT1.1 vaccine [16].

HIV treatment

Children and adolescents

A plenary session at AIDS 2024 reviewed progress and enduring gaps in HIV care for children and adolescents [17]. In 2023, 1.4 million children were living with HIV, with 59% in eastern and southern Africa. Although new HIV acquisitions and deaths have each fallen by half since 2013, ART coverage in pregnancy has plateaued over the past decade, and one in 10 infants exposed to HIV acquired HIV in 2023.

Children with HIV were less likely to be diagnosed than adults in 2023 (66% compared with 87% of adults), and 57% of children were receiving ART compared with 77% of adults. If on treatment, they were less likely to be virally suppressed (84% vs 94%). To close these gaps, early infant diagnosis coverage should be increased in some regions and testing should reach children whose mothers are not engaged in care, those who acquire HIV during breastfeeding and older undiagnosed children. Strategies that could be used include family index testing, community point-of-care early infant diagnosis, increased testing in the clinical setting, oral point-of-care tests and self-testing. Research from South Africa presented at the conference showed that implementing universal HIV testing for children at 18 months of age increased the proportion of children tested annually by 48% between 2018 and 2023 [18].

Improving viral suppression in children on ART requires expedited rollout of dolutegravir-based treatment for children and development and registration of generic formulations containing darunavir/ritonavir and tenofovir alafenamide (TAF) for children experiencing failure on dolutegravir-based treatment. Plans for access to generic long-acting injectable treatment for children in low- and middle-income countries are unclear; long-acting injectables also have the potential to revolutionize the prevention of vertical transmission in low- and middle-income countries by providing pre-exposure prophylaxis (PrEP) to pregnant and breastfeeding women and postnatal prophylaxis to infants. Innovation in treatment and prevention for children and adolescents will require voluntary licensing and technology transfer, targeted donor investment to accelerate generic development, research to develop neonatal formulations, and inclusion of adolescents and pregnant women in clinical studies [19].

Long-acting treatment may help overcome challenges of adherence and stigma faced by some adolescents. Data on the use of long-acting injectable treatment in adolescents remain limited. At AIDS 2024, the 48-week follow up from the IMPACT 2017 study demonstrated high levels of adherence and viral suppression in 144 virologically suppressed adolescents who switched from oral antiretroviral treatment to injectable cabotegravir and rilpivirine [20]. Participants had a median age of 15 years. At week 48, 140 of 144 participants had received the expected number of injections, 97% had HIV RNA <50 copies/ml, and no confirmed virologic failures occurred. Overall, 34% of participants experienced injection site reactions, mainly Grade 1, but all participants preferred the long-acting injectable treatment to oral antiretroviral treatment.

Treatment simplification

Studies of treatment simplification presented at AIDS 2024 provided further evidence for the efficacy of dual therapy consisting of dolutegravir/lamivudine and explored the potential for dual therapy that includes an agent from a new class of antiretrovirals.

The PASO DOBLE study randomized 553 people virologically suppressed on an existing antiretroviral regimen to switch to dolutegravir/lamivudine or bictegravir/emtricitabine/tenofovir alafenamide (B/F/TAF) . At week 48, dolutegravir/lamivudine was non-inferior to B/F/TAF (2.2% vs 0.7% with HIV-1 RNA >=50 copies/ml, risk difference 1.4%). Participants assigned to B/F/TAF [21] gained significantly more weight (1.81kg vs 0.89kg, difference 0.92kg; 95% CI 0.17-1.66) and were more likely to experience weight gain of 5% or greater (29.9% vs 20%, adjusted OR 1.81; 95% CI 1.19-2.76). Weight gain of greater than 5% was observed more frequently in participants who switched from a regimen containing tenofovir disoproxil fumarate (TDF) (41%) or containing abacavir (31%) to B/F/TAF. There was no difference in the frequency of weight gain >5% according to the prior regimen in those who switched to dolutegravir/lamivudine. Lenacapavir, a first-in-class capsid inhibitor, was evaluated in combination with bictegravir in a Phase 2 study (ARTISTRY-1) as a simplified regimen for virologically suppressed people taking complex regimens [22]. At baseline, 81% of participants had a history of HIV drug resistance, and the median duration of antiretroviral treatment was 27 years.

The study randomized participants to receive either bictegravir 75mg/lenacapavir 25mg once daily (n=51) or bictegravir 75mg/lenacapavir 50mg once daily (n=52) or to continue their existing suppressive regimen (n=25). An intention-to-treat analysis at week 48 demonstrated non-inferiority of both lenacapavir dosing arms to the stable background regimen (with 92.2% receiving bictegravir 75mg/lenacapavir 25mg, 90.4% receiving bictegravir 75mg/lenacapavir 50mg and 100% continuing their regimen having an HIV-RNA <50 copies/ml). Virologic data for six participants were unavailable at week 48. Two participants receiving bictegravir 75mg/lenacapavir 25mg and one receiving bictegravir 75mg/lenacapavir 50mg had HIV-1 RNA >=50 copies/ml at week 48; one participant in the bictegravir 75mg/lenacapavir 50mg group had an HIV-1 RNA >=50 copies/ml at week 36 but re-suppressed by week 48 after switching treatment. A single-tablet regimen containing bictegravir 75mg and lenacapavir 50mg will be evaluated in a Phase 3 study.

Co-morbidities and co-infections

Updated WHO Guidelines for the prevention, diagnosis, care and treatment for people with chronic hepatitis B were presented in a symposium on viral hepatitis at AIDS 2024 [23]. The guidelines recommend the use of simplified diagnostics and simplified service delivery to overcome barriers to treatment. The guidelines expand eligibility for treatment by identifying criteria for treatment initiation in the absence of hepatitis B DNA testing. People with detectable hepatitis B surface antigen are now eligible for treatment if they have cirrhosis (F4), based on clinical criteria (or an APRI score of >1.0 or transient elastography [FibroScan®] value of >12.5 kPa) or significant fibrosis (≥F2), based on an APRI score >0.5 or transient elastography value >7.0kPa; or HBV DNA >2,000 IU/mL and raised ALT levels; or the presence of co-infections (such as HIV, hepatitis D or hepatitis C) or other conditions (for example, metabolic-associated steatotic liver disease); or, in the absence of access to an HBV DNA assay, persistently abnormal ALT levels, regardless of APRI score [24].

The symposium also addressed challenges in hepatitis B elimination on the African continent, where approximately 1.9 million people were living with HIV and hepatitis B in 2022 and 64 million had chronic hepatitis B. An enhanced response to hepatitis B on the African continent will require advocacy that involves people living with hepatitis B, improved implementation of hepatitis B birth-dose vaccination, adoption of national viral hepatitis strategic plans, and improved access to point-of-care tests for hepatitis B surface antigen and hepatitis B DNA.

At IAS 2023, results released from the REPRIEVE study showed that daily treatment with pitavastatin reduced the likelihood of major cardiovascular events in people with HIV at low-to-moderate risk of cardiovascular disease by 35%[25]. At AIDS 2024, a symposium explored the implications of the REPRIEVE study findings for low and middle-income countries. Although the study was not powered to detect regional differences, REPRIEVE reported lower cardiovascular event rates in Africa than in other regions, so the five-year number needed to treat to avert one major cardiovascular event was 144 in African participants compared with 55 in participants in high-income countries [26].

Low use of statins for primary prevention of cardiovascular disease in the general population in Africa indicates the scale of the challenge in implementing preventive treatment for cardiovascular disease in low and middle-income settings. More research is needed to identify successful models of integrated care for HIV and non-communicable diseases, speakers agreed, together with greater clarity on the costs of integration and funding of expanded non-communicable disease care. Smoking cessation and control of hypertension may deliver greater reductions in the burden of non-communicable diseases in people with HIV than the use of statins for primary prevention in Africa [27].

People living with HIV have the highest incidence of human papillomavirus-associated anal cancer. Although International Anal Neoplasia Society (IANS) guidelines recommend screening of people with HIV for anal cancer [28], there has been uncertainty about the most effective screening strategy. A retrospective study of 1,620 people living with HIV who underwent anal cancer screening between 2012 and 2019 compared the sensitivity and specificity of five screening strategies recommended in the IANS guidelines[29]. These were anal cytology alone, high-risk human papillomavirus (hrHPV) testing alone, cytology with hrHPV triage, hrHPV testing with cytology triage, or co-testing. The study endpoint was biopsy-proven anal HSIL. The study found that a combined approach of hrHPV testing and anal cytology triage yielded the highest positive predictive value (54%) and triggered the least number of referrals for high-resolution anoscopy. The results show that screening strategies with higher specificity help to limit the use of high-resolution anoscopy, the most costly and scarce diagnostic resource.

Advanced HIV

Late HIV diagnosis, delays in ART initiation and a high burden of tuberculosis pose challenges in reducing the burden of mortality and morbidity related to advanced HIV (defined as a CD4 count <200 cells/mm3 or presenting with a WHO Stage 3/4 AIDS-defining illness in adults and adolescents) [30]. Several studies presented at AIDS 2024 highlighted the potential of enhanced diagnostic capacity and access for improving the outcomes of people with advanced HIV.

A quality improvement initiative in Uganda was designed to improve the use of CD4 testing to identify advanced HIV in people experiencing ART failure in 2022 and 2023. Actions included training for healthcare workers on identifying and treating advanced HIV, formation of facility-level focal advanced HIV teams, commodity management and integration of point-of-care CD4 testing into community HIV services. The proportion of non-virologically suppressed clients who received a CD4 test increased from 42.8% in July-September 2022 to 60% in July-September 2023 [31]. A cost-effectiveness simulation study using data derived from 282 people screened for histoplasmosis, cryptococcosis and tuberculosis in Mexico City found that if point-of-care tests for each condition were to be employed at entry to care, the median time to treatment initiation could be reduced by five days and treatment costs by USD 241.84 per person[32]. Research from Malawi underscored the need for expanded access to diagnostics for cryptococcal antigen in people living with HIV, as well as greater use of liposomal amphotericin and flucytosine in the treatment of cryptococcal meningitis[33].

Studies presented at AIDS 2024 also addressed gaps in knowledge regarding optimal regimens for the prevention of opportunistic infections. A one-month short course of tuberculosis preventive therapy consisting of rifapentine 600mg/isoniazid 300mg (1HP) has the potential to improve completion rates and uptake, but use may be limited by a potential interaction between rifapentine and dolutegravir. A Phase 3 study conducted in Thailand randomized 1,500 virally suppressed people with HIV to either 1HP or 3HP (INH 15mg/kg and rifapentine 750-900mg for three months)[34]. Participants took either dolutegravir/TDF/lamivudine (41.6%) or efavirenz/TDF/lamivudine (58.4%). The study found no significant difference in viral suppression between 1HP and 3HP arms in either dolutegravir or efavirenz recipients.

An intensive 24-hour pharmacokinetic study in 59 participants found that although mean DTG Ctrough concentrations at days 0 and 28 were lower in 1HP recipients, there was no significant difference between study arms in the proportions with DTG Ctrough concentrations above the protein-binding adjusted IC90 (>0.064 mg/L; 92.6% vs 96.9%). The study shows that among people living with HIV in Thailand, co-administration of 1HP with standard-dose dolutegravir is feasible, supporting the scale up of tuberculosis preventive therapy with this ultrashort regimen.

Approximately 70,000 people with HIV die from cryptococcal meningitis in Africa each year and the disease accounts for approximately 19% of global AIDS-related mortality [35]. Preventive treatment with fluconazole has been shown to reduce the chance of cryptococcal meningitis and death in people with cryptococcal antigenaemia, but the risk of mortality is associated with cryptococcal antigen (CrAg) titre and it is unclear if pre-emptive treatment recommendations should vary according to CrAg titre. The ACACIA trial randomized adults with HIV to standard preventive treatment with fluconazole for 24 weeks or fluconazole for 24 weeks and adjunctive treatment with single-dose liposomal amphotericin (10mg/kg). At AIDS 2024, preliminary results were presented for 168 participants in the low CrAg titre group (<1:80) [36]. After 24 weeks of follow up, the clinical event rate did not differ significantly between the two study arms (10.6% in the standard of care arm vs 14.5% in the intervention arm, p=0.43). At low CrAg titres, adjunctive therapy and lumbar puncture do not provide additional benefit in preventing cryptococcal meningitis or death in people with asymptomatic cryptococcal antigenemia, the study investigators concluded, drawing attention to the high survival rate in the standard of care arm [37].

Prevention

PrEP

At AIDS 2024, results of the PURPOSE-1 trial of lenacapavir PrEP demonstrated 100% efficacy of lenacapavir for HIV prevention in cisgender women [38 39]. PURPOSE-1 compared a twice-yearly subcutaneous injection of the HIV capsid inhibitor lenacapavir with oral PrEP regimens of F/TAF or F/TDF in 5,338 HIV-negative cisgender women in South Africa and Uganda. Participants received an injectable or oral placebo according to their randomization. The primary outcome of the study was HIV incidence in those assigned to lenacapavir or F/TAF, compared to background incidence in 8,094 women screened for study entry. The study was stopped early after a planned interim analysis. Background HIV incidence in the screened population was 2.41 per 100 person-years (PYs) compared to 2.02 per 100PYs in F/TAF recipients, 1.69 per 100PYs in F/TDF recipients and 0.00 per 100PYs in lenacapavir recipients.

HIV incidence was significantly lower in the lenacapavir arm compared with the background incidence (0.0, 95% CI 0.0-0.04) and incidence in the F/TDF arm (0.0, 95% CI 0.0-0.10). Incidence in the F/TAF arm did not differ significantly from the background incidence (0.84, 95% CI 0.55-1.28) or from the incidence in the F/TDF arm (1.20, 95% CI 0.67-2.14). Study retention was high (91% at 104 weeks) and similar across study arms and injection adherence was high (91.5% at week 26 and 92.8% at week 52).

Adherence to F/TAF and F/TDF, measured by tenofovir diphosphate levels in a preselected random 10% sample of recipients, was low; by week 26, 70% of F/TAF and 89% of F/TDF recipients had tenofovir diphosphate levels equivalent to taking fewer than two doses per week. A matched case-control study of tenofovir diphosphate levels in 37 F/TAF recipients who acquired HIV and 176 matched control samples from 159 participants who remained HIV-negative showed that medium (2-3 doses per week) and high adherence (4 or more doses per week) was associated with an 89% lower likelihood of HIV acquisition (odds ratio 0.11, 95% CI 0.012,0.49, p=0.0006).

The rate of serious adverse events in PURPOSE-1 was low (2.8% in the lenacapavir arm compared with 4% in the F/TAF arm and 3.3% in the F/TDF arm. Injection site reactions were experienced by 68.8% of participants in the lenacapavir arm compared with 35.3% of placebo injection recipients in the F/TAF arm and 33.9% in the F/TDF arm. The frequency of injection site reactions diminished with each dose. Four participants in the lenacapavir arm discontinued due to injection site reactions, but no study participant experienced a serious injection site reaction. Nausea and vomiting were less frequent in lenacapavir recipients compared with the other study arms. A total of 510 pregnancies were confirmed in PURPOSE-1 participants and available pregnancy outcomes were similar to those expected in the background population (spontaneous miscarriage rate of 10.4% in the lenacapavir arm, 15.5% in the F/TAF arm and 12.2% in the F/TDF arm; three stillbirths in the lenacapavir arm, four in the F/TDF arm and one in the F/TDF arm).

Three clinical trials are underway to assess the efficacy and safety of lenacapavir as PrEP in gay and bisexual men, trans men and women, cisgender women and people who inject drugs.

> **"If approved and delivered – rapidly, affordably, and equitably – to those who need or want it, this long-acting tool could help accelerate global progress in HIV prevention."**
>
> **Sharon Lewin** [40]

A plenary presentation explored reasons for slow PrEP uptake and highlighted opportunities to improve the impact of HIV prevention [41]. The global AIDS target is 10 million PrEP users by 2025. Midway through 2024, an estimated 6.7 million people had started PrEP, with almost all using oral PrEP. Wider access to PrEP could have averted many of the 17 million HIV acquisitions that have occurred since 2012. Asia and the Pacific and eastern Europe and central Asia have low levels of PrEP coverage (3.5% of global PrEP initiations to 2024) despite accounting for 35% of HIV acquisitions in 2022. Lessons from contraceptive coverage highlight that increased choice of methods improves coverage.

However, access to injectable long-acting cabotegravir (CAB-LA) and the dapivirine ring remains limited due to slow regulatory approval, lack of donor support and consequent lack of supply. For lenacapavir, a new approach is needed to accelerate access; the plenary speaker proposed starting with large multi-country pilot studies that improve our understanding of how to rapidly scale delivery and create demand for PrEP. Rapid guidance from the World Health Organization (WHO) should be accompanied by pricing negotiations that provide guarantees for volume so that manufacturers can meet demand quickly. Regulatory submission and review should occur as soon as data are available, using expedited processes already employed to approve other prevention products [42].

> **"6.7 million [people] on PrEP is dismal and we should be embarrassed."**
>
> **Elizabeth Irungu, Jhpiego, Kenya** [43]

A symposium discussed whether current monitoring requirements for PrEP can be simplified to remove barries to uptake and improve person-centred care[44]. WHO recommends self-testing for HIV for people initiating, continuing or re-starting oral PrEP or the dapivirine ring to reduce the frequency of clinic visits [45]. A recent meta-analysis indicates that renal function monitoring may be optional for younger populations (< 50 years) without renal co-morbidities [46]. A panel discussion agreed that for most people, a negative HIV antibody test was the only prerequisite for initiating PrEP and that easier access to PrEP, such as through pharmacies, may be especially important for reaching underserved populations.

Several studies presented at AIDS 2024 showed that in addition to oral PrEP, pharmacies can deliver post-exposure prophylaxis (PEP) and injectable PrEP. The PharmPrEP study reported on PEP uptake at 45 pharmacies in Kenya [47]. Adults seeking sexual health products were screened (n=2134) for PrEP or PEP eligibility; 60% were eligible for PEP (exposure within 72 hours) and, after HIV testing, 94% of those eligible initiated PEP between July 2023 and January 2024. More than half (59%) were male and few (<15%) reported any prior use of PEP or PrEP. A total of 63% reported behaviours in the previous six months that warranted PrEP use. The investigators concluded that strategies to transition PEP users with ongoing vulnerability to PrEP and guidelines to support the provision of PEP through private pharmacies are needed. Pharmacies could also be sites for delivery of injectable PrEP, subject to pharmacist training, development of policies that enable pharmacists to administer injections and funding models that encourage uptake and cover pharmacy staff time, PharmPrEP qualitative research showed [48].

It may also be possible to reduce the frequency of clinic visits for sexually transmitted infection (STI) screening in PrEP users without negatively impacting healthcare client outcomes. The EZI-PrEP randomized study in the Netherlands is assessing the impact of reducing the frequency of STI testing among PrEP users. Clients in the intervention arms are tested every six months compared with a three-monthly schedule of clinic visits in the standard of care. Preliminary results from 428 participants attending clinics in four cities showed a 32% lower overall number of clinic visits in the six-monthly arm (rate ratio 0.68, 95% CI 0.62,0.74) along with a higher rate of unscheduled STI clinic visits in the six-monthly arm (visit rate ratio 1.78, 95% CI 1.46-2.18) compared to three-monthly arm[49]. STI positivity was comparable between the arms.

Research also provided new evidence on the diagnostic challenges associated with the implementation of CAB-LA. Diagnosing acute HIV acquisition before CAB-LA initiation is critical to avoid the development of drug resistance. A study in Zambia reported on the use of nucleic acid amplification testing (NAAT) to rule out acute HIV acquisition and confirm eligibility for CAB-LA [50]. Of 1,256 people who tested negative on a third-generation rapid antibody test, 12 tested positive by NAAT and four had received the first CAB-LA injection by the time the NAAT result was available. The study found that the use of two different rapid antibody tests resulted in 100% concordance with NAAT, suggesting that where point-of-care NAAT cannot be implemented, two rapid antibody tests should be used to confirm HIV-negative status before CAB-LA initiation [51].

In the HPTN 083 open-label extension study of CAB-LA, HIV RNA testing was done at each injection visit as CAB-LA PrEP has been shown to delay the detection of HIV by antibody/antigen testing algorithms, a phenomenon known as long-acting early viral inhibition (LEVI). An evaluation of the performance of HIV RNA screening in 2,620 participants found that the positive predictive value of an isolated positive HIV RNA result was 9.1% among men and trans women with CAB-LA exposure in the past six months compared with 60% among those without recent exposure – leading to unnecessary PrEP interruptions for those with false positive results. Guidelines for HIV testing algorithms for the detection of HIV acquisition in the context of long-acting PrEP use should consider these performance characteristics, the study investigators concluded.

The HPTN 084 study group reported on maternal and infant outcomes in women exposed to injectable cabotegravir during pregnancy in the open-label extension study after the removal of contraception restrictions. The analysis compared pregnancies exposed to CAB-LA before conception (n=68) or during pregnancy (n=212) and pregnancies unexposed to CAB-LA (women who opted for F/TDF in the open-label phase, n=45). There was no significant difference in composite poor pregnancy outcomes between those exposed to CAB during pregnancy, prior to pregnancy or unexposed pregnancies (33%, 38% and 27%, respectively). Importantly, there were no seroconversions reported in any of the pregnant participants and CAB-LA was well tolerated in pregnant women[52]. These data provide reassurance regarding the use of CAB-LA in pregnancy in populations where HIV incidence is high.

DoxyPrEP and DoxyPEP

AIDS 2024 saw the term, "DoxyPrEP" (doxycycline pre-exposure prophylaxis to describe taking the antibiotic before sex), make its debut to join the better-known "DoxyPEP" (doxycycline post-exposure prophylaxis). Two studies demonstrated that DoxyPrEP was feasible and associated with reductions in STIs in men who have sex with men and in female sex workers.

In Canada, a randomized study assigned 52 men who have sex with men living with HIV and previously diagnosed with syphilis to receive oral doxycycline 100mg once daily or placebo for 48 weeks . Participants underwent STI screening every three months, and 41 participants completed follow up. Pill counts showed that 77% had adherence greater than 85%. There was no significant difference in adverse events or tetracycline resistance in S. aureus. Rates of bacterial STIs were significantly lower in the doxycycline recipients (syphilis 79% lower, chlamydia 92% lower and gonorrhoea 68% lower) compared with those in the placebo arm. A retrospective study in Japan among 40 female sex workers who received doxycycline 100mg as PrEP showed a 67% decline in STI incidence compared with the period prior to doxycycline use. The syphilis incidence was zero; there was a marginally significant reduction in chlamydia and no significant change in gonorrhoea compared with the period prior to doxycycline use.

Preventing vertical transmission

Intimate partner violence may increase vulnerability to HIV acquisition and influence viral suppression by reducing ART uptake and adherence. In pregnant women, intimate partner violence may contribute to infant HIV acquisition through these pathways. A modelling analysis used available national data from 46 African countries on HIV prevalence, ART coverage and intimate partner violence to estimate the proportion of infant HIV acquisition that was attributable to intimate partner violence [55].

The study found that intimate partner violence had the greatest impact on vertical transmission in countries where ART uptake is high. Whereas 4% of vertical transmission was attributable to intimate partner violence in Niger, the population-attributable fraction was 28% in Uganda. In the model, intimate partner violence had the greatest impact on vertical transmission among 15-19-year-old women; in this group, 20% of vertical transmission was attributable to intimate partner violence compared with 6% among women aged 45-49. This age-related pattern was consistent across all regions of Africa. Focusing on the elimination of intimate partner violence in adolescent girls and young women could have the largest population-level impact on vertical transmission, especially in settings where ART coverage is high.

Eastern Europe and Central Asia

AIDS 2024 highlighted HIV in eastern Europe and central Asia, including the structural barriers that prevent the uptake of services by key and vulnerable populations in the region.

Russia's war on Ukraine has had a significant impact on services for key populations. The number of people receiving ART has fallen from approximately 130,000 in January 2022 to 118,348 in January 2024, and Russia has damaged, destroyed or occupied approximately 20% of healthcare facilities providing ART [56]. An analysis of opioid agonist treatment (OAT) access in 17,265 people who inject drugs and receive OAT compared OAT discontinuation in frontline, target and remote regions between 2022 and 2024, as well as between displaced and local people [57]. Internal displacement due to the war greatly increased the risk of treatment discontinuation in all regions; people internally displaced in frontline regions were almost 17 times more likely to discontinue treatment than people in regions remote from the fighting who were not displaced. Take-home dosing (a 30-day supply of OAT) – introduced after the invasion – reduced the risk of discontinuation by 28% compared to daily dosing.

A plenary presentation on integrated care for HIV, tuberculosis and hepatitis C in Ukraine drew attention to the critical importance of commodity security and treatment continuity during conflicts and humanitarian emergencies [58]. After the Russian invasion of Ukraine threatened the continuity of drug supplies, PEPFAR and the Global Fund procured and delivered 210,000 packages of TLD in 2022 to maintain drug supplies.

"The 6-month buffer of drugs and commodities is a must-have. And definitely, you should have a very clear emergency plan!"

Olga Gvozdetska, Ukraine [59]

In Moldova, vending machines have been used successfully to broaden access to HIV prevention and harm reduction commodities and HIV self-tests. A pilot project by Positive Initiative placed 29 vending machines in 20 towns in Moldova; 25% of Positive Initiative clients are now using the vending machines and, in one year, the machines freed up 4,000 hours of social worker time that would otherwise have been spent on supplying commodities and information [60]. The vending machines enabled Positive Initiative and partner organizations to maintain harm reduction and HIV prevention services safely during the COVID-19 pandemic.

Research from Ukraine showed the value of integrating services for people who use drugs into primary care. A two-year randomized controlled trial assigned 1,459 participants with opioid use disorder to receive care in specialist drug treatment centres or primary care clinics. Participants assigned to primary care were significantly more likely to access recommended services for their condition (quality health indicators) at all time points after six months compared with participants assigned to specialist addiction centres, confirming the need to integrate care for people who inject drugs who are vulnerable to acquiring HIV and TB [61].

Key and vulnerable populations

Community leadership

Research presented at AIDS 2024 demonstrated the important role of civil society organizations in the HIV response. A survey of laws and policies in 194 countries concerning the ability of civil society organizations to operate freely and receive state funding to deliver services showed that the odds of people living with HIV knowing their status increased by nearly a factor of 2 in countries that had adopted or partially adopted civil society policies [62]. The study evaluated national laws and policies in place between 2017 and 2023. It found that 90 countries had adopted policies permitting both registration and freedom of action, as well as social contracting, for civil society organizations by 2023, compared with 85 in 2017. Adoption of both policies was associated with an 89% higher likelihood of people living with HIV knowing their status [OR 1.899, 95% CI 1.42-2.53, p<0.0001].

Stigma, discrimination and criminalization

Stigma, discrimination and criminalization remain major obstacles to the HIV response in all settings. An analysis of pooled individual-level data from 76 national surveys conducted in 33 African countries demonstrated that higher levels of community stigma were associated with lower rates of HIV testing, ART uptake and virological suppression[63]. The study assessed the relationship between HIV outcomes and three measures of stigma in 842,169 people, including 70,109 people living with HIV. A median of 36% had discriminatory attitudes towards people living with HIV, 18% expressed shame at associating with people living with HIV, and 79% perceived HIV stigma. A 50% increase in community discriminatory attitudes was associated with a 17% lower likelihood of people living with HIV being on ART and a 15% lower rate of virologic suppression. Greater shame was associated with a 12% lower ART uptake and an 11% lower rate of virologic suppression.

Stigmatization of people with HIV in healthcare settings continues to pose a challenge to engagement and retention in care. A survey of experiences of criminalization and enacted stigma in eight countries in eastern Europe and central Asia between 2020 and 2023 reported that almost half of participants (46%) had experienced stigma in healthcare settings [64]. A survey of healthcare worker attitudes toward people living with HIV and key populations in western and central Europe revealed that 57% had concerns about drawing blood when treating people with HIV, 8% would avoid physical contact, and 30% had witnessed discriminatory or negative remarks about people living with HIV [65].

Laws that criminalize same-sex relationships have increased the barriers to care for key populations in many African countries. In Uganda, Ghana and Kenya, recent laws or proposed legislation also criminalize advocacy [66]. At AIDS 2024, the Ugandan Ministry of Health and AIDS Commission reported on measures taken since the 2023 Anti-Homosexuality Act to ensure continuity of prevention and health services for men who have sex with men [67]. These measures included a circular that reminded healthcare workers of the need to provide services to all people without discrimination, training in the provision of key population-friendly services in 24 districts, dialogue with law enforcers and facilitation of key population peers to conduct client follow up, refills and linkages.

In Ghana, during the period leading up to the passing of the Human Sexual Rights and Ghanaian Family Values Bill in February 2024, community-based strategies were employed to maintain engagement with services while reducing the visibility of service users [68]. These included the use of peer educators pivoting from group outreach to engaging one-on-one to reduce visibility, shifting testing and treatment to homes and safe locations, and promoting multi-month dispensing of ART and PrEP to eliminate clinic visits. The shift in service provision increased the number of men who have sex with men tested for HIV and an increase in the proportion who tested positive.

Global Village

The Global Village is where communities can demonstrate the application of science and quality leadership, and conference delegates and the general public can witness how science translates into community action and intervention. A blend of speaker sessions and cultural activities, the Global Village is also a hub for watching live performances, broadening networks, and touring marketplace booths and art exhibits.

The Global Village was open to conference delegates and visitors from outside the conference from Sunday, 21 July, to Thursday, 25 July.

Global Village sessions included: a debate on the use of DoxyPEP in poorly regulated settings; a review of policy barriers to adolescent HIV testing, prevention and treatment; a report-back on the global advocacy agenda for people living with HIV from the #Living2024 pre-conference, organized by the Global Network of People Living with HIV (GNP+); and a review of the impact of anti-LGBTQI+ legislation and violence on the HIV response in East Africa, and how to respond.

Workshops in the Global Village included an ideation session to design HIV services that meet the challenges faced by young people, a session to share approaches and learning in addressing HIV-related stigma, and another on designing merchandise for advocacy and fundraising.

Events in the Global Village also included live performances, 29 film screenings and 27 art exhibits.

The Global Village featured 25 networking zones designed to allow groups to meet and discuss around thematic areas. These included an Indigenous Peoples zone, Interfaith zone, U=U University, Cure Canvas – a Collective Vision for HIV Cure, and MPACT Queer Hub. Visitors to the Global Village could also engage with 29 NGO booths and 17 marketplace booths, with NGOs from Ghana, India, the Philippines, Trinidad and Tobago, and Uganda, among others.

Overall, 92% of delegate survey respondents reported visiting the Global Village and 80% said they were satisfied or very satisfied with the quality of Global Village sessions and areas. A total of 82% agreed or strongly agreed that the Global Village represented the diversity of the HIV response and 77% agreed that sessions and workshops in the Global Village offered new and relevant community perspectives. Two-thirds (66%) of respondents agreed that the Youth Pavilion offered a platform for a youth-driven HIV response.

Educational tours

Five educational tours were offered in collaboration with seven civil society and community-based organizations in Munich. These included: Prop e.V, which provides drug emergency services and other harm reduction support to people who use drugs in Munich; the Public Health Service of the City of Munich; Munich Aids-Hilfe; Sub, diversity and LeZ, which provide services for gay and bisexual men, lesbians and trans people in Munich; and Trans*Inter*Beratungsstelle, which provides services for trans people in Bavaria. A total of 125 delegates signed up for the tours.

Positive lounge

The Positive Lounge is a dedicated space for delegates from key populations and people living with and affected by HIV to recharge, refresh, relax and reconnect in a nurturing environment. It is designed to facilitate and support dialogue and discussion, with a balance between quiet relaxation and tailored activities. The Positive Lounge was open each day of the conference and attracted a total of 2,247 visits. An average of 518 people visited the lounge on each full day of opening.

Volunteers

Volunteers at AIDS 2024 helped coordinate programme activities, greeted conference delegates, assisted with registration, acted as guides during the conference, staffed various offices and activities, and performed other crucial tasks.

The conference enjoyed support from 146 volunteers, including 58 from the host country, Germany, 33 from other western European countries, 24 from North America, 19 from Africa, 10 from Oceania, one from eastern Europe and central Asia, and one from South and Southeast Asia. A total of 41% of volunteers were under 36 years of age and 9% were under 26 years of age.

How was it covered?

AIDS 2024 achieved media coverage comparable to AIDS 2022, with a total of 656 news articles about the conference. Top-tier media outlets, including The New York Times, Forbes, Associated Press, The Guardian, Le Monde, Politico and The Economist, published 91 articles.

Sampling of top-tier headlines

"A Daily Pill to Prevent S.T.I.s? It May Work, Scientists Say."

The New York Times

"Humanity is closer to stopping HIV, and the biggest obstacle is the price of the drug that will do it."

El Pais

"Experts say a twice-yearly injection that offers 100% protection against HIV is 'stunning'."

AP

"At International AIDS Conference, Emphasis On Children, Human Rights"

Forbes

"How stem cell transplants are curing HIV"

Politico

"HIV drug could be made for just $40 a year for every patient"

The Guardian

"The methods explored by researchers to cure HIV"

Le Monde

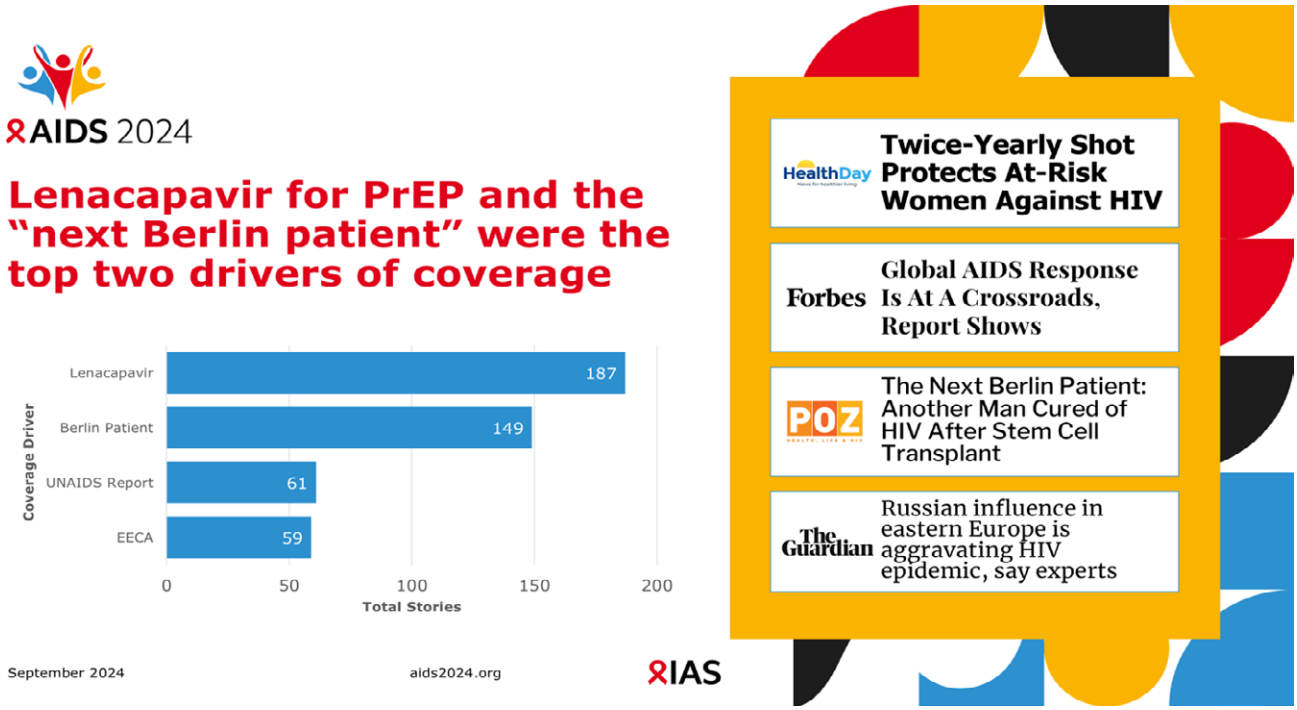
"Clues to a possible cure for AIDS"

The Economist

Communications and media events at AIDS 2024

Press conferences	Media roundtables	Press conferences
Embargoed media briefing	Towards an HIV cure	Putting people first: How to translate science and policy to the world
Scientific highlights press conference	Evolving national and regional politics in eastern Europe and central Asia: How does it impact the HIV epidemic?	Leaders and luminarie dismantling homophobia, challenging HIV and celebrating who we are (Global Village session)
Opening press conference	Access to long-acting injectable PrEP	

The topics that attracted the greatest media attention were lenacapavir PrEP (187 stories), the "next Berlin patient" (149 stories), the launch of the UNAIDS report (61 stories) and eastern Europe and central Asia (51 stories).



Overall, AIDS 2024, compared with AIDS 2022, saw similar or increased engagement and reach across most digital channels, including social media and email campaigns.

AIDS 2024 digital highlights

Over 50 million people reached through over 11,000 social media posts, 4 million more than at AIDS 2022

1 million+ impressions generated from IAS and AIDS conference Instagram posts, an increase of over 1,600% from AIDS 2022 Instagram impressions

50,000+ unique visits to the AIDS 2024 website throughout the conference, a 27% decrease on AIDS 2022 website visits due to less virtual attendees

32.7% open rate of AIDS 2024 daily digest emails, an 11% higher open rate than the industry average

2.4 million impressions of IAS and AIDS conference social media posts, up 59% on AIDS 2022 post impressions

Over 138,000 engagements with IAS and AIDS conference social media posts, up 59% on AIDS 2022 post engagements

How did it go?

Key informant interviews

Fourteen stakeholders (including conference co-chairs, track chairs, sponsors, partners, community members and other civil society representatives) provided in-depth feedback on the scientific content of the conference, organization, expected outcomes and recommendations for maximizing impact.

Online delegate survey

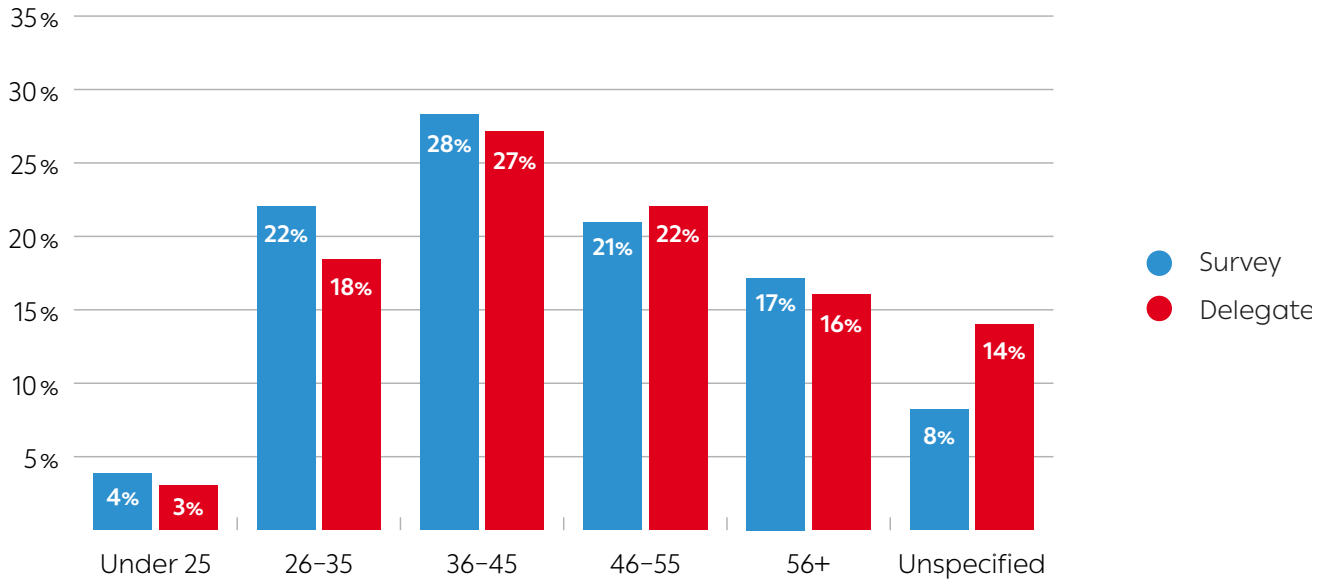
Of the 10,646 participants, 1,989 (18%) responded to an online survey on 20 topics. The quotations presented here are all drawn from the survey and key informant interviews. The quotations have been minimally edited for clarity and brevity where needed.

- A total of 47.5% were female, 42.5% were male, 2% were non-binary or gender non-conforming and 8% did not share their gender.
- A total of 43% of respondents were healthcare workers or social service providers, 18% were researchers, 10% had policy or administrative roles, 6% were advocates or activists, 7% were students and 3% were media representatives.
- A total of 37% of respondents identified as belonging to at least one key population.
- The survey response rate (18%) was slightly higher than response rates for AIDS 2022 (16%) and AIDS 2020: Virtual (17%).
- The regional distribution of survey respondents and conference participants was similar.

Just over half of respondents (53%) had been working in the field of HIV for at least 10 years, including 37% who had been working in the field for at least 15 years. Of the remainder, 6% were newcomers to the field (0-2 years); 17% had been working in the field of HIV for 2-5 years and 21% for 6-10 years.

More than half of respondents (52%) were attending an International AIDS Conference for the first time.

Delegates and survey respondents by age



What did people get out of it?

News of a significant scientific innovation

Standing ovations at IAS conferences signal recognition of major scientific news that will have a significant impact on the future trajectory of the HIV pandemic. At AIDS 2024, delegates rose to applaud Linda-Gail Bekker and colleagues after the presentation of the PURPOSE-1 trial results, which showed that injectable lenacapavir prevented HIV acquisition in every woman who received it.

Asked about their take-home message from AIDS 2024, delegates were more likely to cite PURPOSE-1 and lenacapavir PrEP than any other topic.

"Lenacapavir for prevention has the potential to change everything, if access can be achieved."

Survey respondent

"A standout moment was learning about the twice-yearly injectable lenacapavir for PrEP, which showed 100% efficacy and superiority in HIV prevention – a groundbreaking advancement that could revolutionize our approach to HIV prevention efforts. These experiences reinforced how crucial it is for science, policy and activism to come together to drive meaningful progress."

Survey respondent

Most key informants identified the results of PURPOSE-1 as the major scientific news of AIDS 2024 and agreed that the use of lenacapavir for PrEP had the potential to greatly enhance the impact of PrEP as an HIV prevention tool. Key informants agreed that rapid introduction at scale will require attention to commodity management, supply chains, regulatory submission and review, as well as guidelines for use, before any implementation can take place.

> **"With lenacapavir, I think there's a big push to go big, and I hope that people are really thinking that out so that they don't mess it up. The programmatic challenge is setting up a system to support having a new prevention product and setting it up at the pace that we're hearing donors, stakeholders and Gilead talk about. It's not impossible, but it's like a relay race where everything's got to be in place."**
>
> Key informant

Another key informant commented on the need to be ambitious in scale up of lenacapavir and other PrEP products, drawing lessons from antiretroviral treatment.

> **"We have done very large-scale implementation of innovations before – PEPFAR and the dolutegravir transition – and we need to learn from those, not just from PrEP studies, about the critical importance of target-setting and monitoring and being bold in our vision. We are getting closer to 2030 and not achieving what we hoped for – we need to push harder!"**
>
> Key informant, track chair

But key informants also stressed that there is much still to learn about using lenacapavir as PrEP and that further data to support large-scale implementation are needed on the risk of resistance, efficacy in various populations and the duration of protection after missed doses. These data are needed to clarify how lenacapavir PrEP can be implemented and its place within the array of HIV prevention products.

"Some misleading reporting described it like a vaccine. We should be careful not to give the impression that lenacapavir will just replace all the other PrEP products."

Key informant, track chair

Although some key informants saw a need for rapid demonstration studies to explore some of these questions, others were sceptical, arguing that these might hold up implementation while gathering relatively little useful data. Instead, they advocated integrating the necessary research into rollout programmes to avoid wasting time.

"Do we need to frame it as an implementation study, or can we do national rollout monitoring using the systems in place? We've learned more from the implementation rollout of oral PrEP than we learned from the implementation studies. Do we need to do these implementation studies, [which] are expensive?"

Key informant, multilateral agency

"It took six years from trial results to get to demonstration projects for the dapivirine ring and three years for injectable cabotegravir. We cannot afford to wait that long to get to scale with lenacapavir."

Key informant, civil society

Survey respondents and key informants frequently stressed the affordability of lenacapavir PrEP as the critical determinant of implementation and uptake. Key informants noted that while the scope of voluntary licensing agreements would be a critical determinant of the speed at which prices might fall, the pace of early introduction would depend on matching the price set for injectable cabotegravir.

Key informants agreed that PrEP product choice had been a major theme of the conference, but several key informants highlighted the growing complexity of product choices and suggested that successful scale up and adoption of these products will require greater investment in communications regarding choice and usage.

"PrEP choice is only a reality if the products are available and if people are aware that they have choices. We talk about demand creation but that requires awareness."

Key informant, civil society

"[There is] a whole spectrum of biotechnologies that needed to be translated to people. These are not easy concepts, especially for the vulnerable populations. In the future, we need the kind of strategies that combine knowledge, information, language, communication, demand creation."

Key informant, Organizing Committee

Greater insights on person-centred care

Person-centred care meets the changing needs, priorities and preferences of each person living with or affected by HIV. AIDS 2024 aimed to highlight recent advances and gaps in person-centred care, including the management of health concerns associated with ageing, cardiovascular disease and sexual and reproductive health and rights. Many delegates said that the importance of person-centred care was one of their take-home messages from AIDS 2024.

> **"My take-home message from AIDS 2024 is the importance of prioritizing holistic care for HIV clients. The conference highlighted innovative approaches, community-led initiatives, and research findings that emphasize the need for comprehensive, person-centred care. I'm inspired to advocate for and implement holistic care in my work, ensuring that individuals living with HIV receive the support they need to thrive."**
>
> Survey respondent

Delegates and key informants were especially likely to draw attention to the importance of mental health when emphasizing person-centred care as a key message of AIDS 2024.

> **"The role of mental health is crucial, including psychosocial support in the communities we work in."**
>
> Survey respondent

> **"Mental health integration is necessary for effective HIV management."**
>
> Survey respondent

> **"My key takeaways from the conference were the urgent need for increased mental health funding and the integration of mental health into HIV care."**
>
> Survey respondent

> **"Mental health or psychosocial support needs to be given attention, and this includes dedicated funding for this aspect of work."**
>
> Survey respondent

Key informants welcomed the greater focus on mental health as a component of person-centred care and emphasized its critical importance for HIV prevention services. Some key informants used the conference as an opportunity to learn more about the topic, recognizing the need for services that incorporate mental healthcare.

> **"Mental health and HIV was one of the key areas that we spent time to listen carefully so that we can look programmatically because it has impact on programmes that we support on the ground."**
>
> Key informant, international agency

Adolescents and children

Key informants drew attention to the prominence and quality of research and invited-speaker sessions focused on the needs of children and adolescents with HIV. They praised the plenary presentation on HIV care for children, delivered on the first day, as a call to action for the global HIV response, and highlighted sessions that addressed the emerging needs of adolescents and the importance of research into co-morbidities in young people with HIV.

A total of 42% of delegate survey respondents said they gained "a lot" of information on adolescents and young people at AIDS 2024. Survey respondents frequently referred to the need for enhanced programming for children and adolescents as a take-home message from the conference, as well as policy changes that can improve the ability of HIV services to provide HIV prevention and testing services to adolescents.

"My take-home message from AIDS 2024 is the critical need for integrating HIV/AIDS prevention with maternal and child health interventions, especially in vulnerable communities. The conference underscored the importance of a decisive approach that addresses both the health of mothers and the survival of children."

Survey respondent

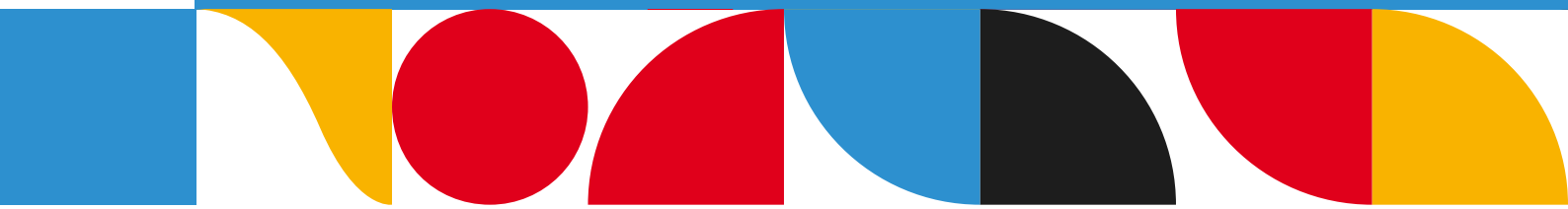
"There is a lot to be done in making changes in policies so that my country can engage the adolescents and young people."

Survey respondent

Democratic space and a strong activist voice

Key informants, including stakeholder agencies, commented on the importance of AIDS 2024 as a democratic space that enabled activist voices to be heard by policy makers. They noted that communities had experienced frustration in other settings at national and regional levels when blocked from expressing their needs. Several key informants remarked on the importance of preserving the space for protest and civil society at a time when anti-democratic forces are increasingly targeting the rights and free expression of marginalized communities. One key informant noted that through the presence of a strong activist voice, AIDS 2024 enabled conversations between donors and policy makers about the needs of key populations that might not otherwise have been possible.

> **"We were using our diplomatic voice to engage with policy makers, to highlight, 'look at what we're seeing, listen, but also understand that if we criminalize populations, we will not be able to reach the universal health coverage that we are aiming for. We will not be able to reach the SDGs.' And so, it was a strong platform**
>
> **Key informant, international agency**



Key informants, ranging from donors to basic scientists, agreed that the community and activist presence at International AIDS Conferences provides a unique opportunity for researchers and policy makers to learn about the breadth and diversity of the global pandemic, as well as the social and economic contexts of vulnerability to HIV.

> **"The value of attending this meeting for early-career researchers is the exposure they get to other tracks, to community and activism, a global perspective. It is important for their career development, and I was pleased to see a few young people who have worked in my lab, who came to Munich as volunteers because they wanted the experience again."**
>
> **Key informant, track chair**

An enhanced poster exhibition

After several conferences in which poster exhibitions either took place exclusively online or were limited in size, AIDS 2024 saw the return of a large-scale poster exhibition featuring 2,200 posters exhibited in three one-day sessions. Delegates expressed high levels of satisfaction with all aspects of the poster exhibition, especially the scientific quality of posters (81% satisfied or very satisfied) and the number of posters available for viewing (79% satisfied or very satisfied).

"There were excellent opportunities for discussions with colleagues and a real buzz with people making new connections – these poster sessions are where collaborations start so often, so for me, it was a big feature of the conference this year."

Key informant, track chair

"The poster session was very successful, very active. For people attending and standing by their posters this year, it had meaning – it was good for their careers."

Key informant, track chair

Will it make a difference?

Impact on participants' work

Overall, 98% of survey respondents agreed that attending AIDS 2024 would enable them to take at least one action in their work or advocacy. More than half (57%) expected to use knowledge gained at AIDS 2024 to contribute to the development of HIV science, and 51% planned to identify new options for partnerships or strengthen existing partnerships.

Similarly, 56% agreed that AIDS 2024 would improve their ability to engage in the HIV response, and 54% expected to adjust their practices to the latest evidence.

Survey respondents anticipated that the conference would support their work in several ways. For example, 61% expected to share information gained at AIDS 2024 with colleagues, peers and networks, whether through presentations or the development of materials, while 35% would build capacity in their organizations, through training or the development or updating of guidelines or procedures. In all, 41% said that attending AIDS 2024 would improve their ability to engage with communities living with or affected by HIV in their work.

More than one in three (36%) anticipated developing new projects or research or scaling up existing projects or programmes as a result of taking part in the conference, and almost one in five (19%) expected that as a result of attending AIDS 2024, the work focus of their organization would change.

Impact on policy and programming

Key informants anticipated three major impacts of AIDS 2024 on policy and programming. They expected that AIDS 2024 would accelerate progress towards the adoption of long-acting PrEP by raising awareness of its place in HIV prevention among country programmes and by mobilizing donors and policy makers to achieve rapid access to CAB-LA and lenacapavir for PrEP. They also expected that the greater attention paid to gaps in care for children and adolescents at AIDS 2024 would lead to renewed efforts at country level to address these gaps through improvements in diagnosis and in the development of adolescent-friendly treatment and prevention services. Several key informants highlighted research presented at AIDS 2024 demonstrating the ways in which parental consent acts as a legal barrier to HIV testing and prevention services for adolescents as especially important in identifying a critical policy gap that must be addressed.

Key informants agreed that AIDS 2024 had provided valuable opportunities to engage policy makers in discussion about the needs of key populations and the legal and law enforcement barriers that prevent the delivery of person-centred prevention and care services for key populations.

A total of 34% of survey respondents expected that participation in AIDS 2024 would strengthen their advocacy or policy work. A similar proportion (33%) expected that they would use what they learnt at the conference to raise awareness among communities, policy makers and scientific leaders, and 22% would advocate for changes in government behaviour.

Conclusions: Did we achieve our objectives?

Objective 1: Innovation through scientific discovery. Present and critically discuss the latest scientific evidence shaping innovative approaches to preventing and treating HIV and related co-infections and co-morbidities, including TB, from basic science through clinical research, epidemiology and social science to the analysis of structural and economic determinants of health.

Overall, 95% of delegates said that they had learnt about the latest research findings in HIV prevention, treatment and care. A total of 56% strongly agreed that they had learnt about new research findings. Survey respondents were more likely to say that they had gained new information on long-acting treatment and prevention than any other subject at AIDS 2024; 60% said they had gained "a lot" of information about long-acting treatment and prevention at the conference.

There was widespread agreement among key informants and survey respondents that the results of PROMISE-1 represent a transformational innovation for the global HIV response – if access can be achieved rapidly.

"The lenacapavir results give a lot of hope but we need to get the LEN PrEP everywhere at a good price."

Survey respondent

"Innovative treatments like long-acting PrEP, including lenacapavir, promise a new era in HIV prevention – offering hope and highlighting the strides we are making towards ending the epidemic."

Survey respondent

"There is evidence of novel HIV prevention approaches for young women (including lenacapavir) that could address adherence challenges and provide choice options."

Survey respondent

Objective 2: Implementation science. Advance research that addresses the challenges and opportunities of implementing novel prevention and treatment modalities, including long-acting technologies, in different populations and contexts.

A total of 92% of survey respondents agreed that they had learnt about the challenges and opportunities of implementing novel prevention and treatment modalities in different populations and contexts during AIDS 2024. Half of all respondents strongly agreed that they had learnt about these topics at the conference and 81% said they had learnt about differentiated service delivery at the conference.

Key informants drew attention to the broad range of research that would aid implementation presented at AIDS 2024, noting the value of data on the use of injectable cabotegravir during pregnancy, PrEP product choice and DoxyPrEP for HIV and STI prevention.

"What stood out for me was that CAB-LA was safe for use by pregnant women, which was reassuring."

Survey respondent

"There is a lot of innovation around differentiated service delivery approaches for HIV prevention. HIV testing for clients continuing on long-acting injectable cabotegravir still requires more research."

Survey respondent

Objective 3: Key and vulnerable populations. Address enduring gaps in the HIV response, including areas where greater investment is needed in research and person-centred service delivery and where the needs of communities remain neglected. These include intersectional stigmas of HIV, homophobia and transphobia, as well as gender, ethnic and racial disparities and inequalities.

Overall, 87% of survey respondents agreed that this objective had been met. A total of 92% of survey respondents agreed that they had learnt about remaining gaps in the HIV response at AIDS 2024, including 51% who strongly agreed that they had learnt about remaining gaps. A total of 92% of respondents said they had learnt about the ways in which stigma and discrimination affect access to services for key and vulnerable populations, while 83% of respondents agreed that they had learnt about interventions to reduce intersectional stigmas of HIV, homophobia, transphobia, and ethnic and racial disparities.

A total of 51% of survey respondents said they gained a lot of new information and insight on key populations at AIDS 2024.

"New HIV prevention technologies are coming in at a time when adolescent girls and young women are highly vulnerable (to acquiring) HIV. Ensuring that CAB-LA and the vaginal ring reach the communities most in need is highly critical."

Delegate survey respondent

"Implementation strategies to scale up evidence-based services and reducing barriers to access – which include stigma and cost – are the main issues we need to address to achieve equity in HIV prevention and finish our work of getting to no new acquisitions."

Delegate survey respondent

"Collaboration and community-led initiatives are crucial for achieving impactful and sustainable results. It's essential to recognize the need for intersectional approaches and consider the influence of anti-rights movements, initiatives and funding when developing HIV responses."

Delegate survey respondent

Objective 4: Central and eastern Europe. Explore the complex dynamics of the rapidly growing HIV epidemic in eastern Europe and central Asia, with particular emphasis on structural barriers, such as criminalization and other infringements of human rights, that prevent uptake of services by people living with and affected by HIV, and the impact of the war in Ukraine.

Overall, 79% of delegates said they learnt about structural barriers to the uptake of services by key and vulnerable populations in central Asia and eastern Europe, including 37% who strongly agreed that they had learnt about this topic at AIDS 2024.

Key informants stressed the value of AIDS 2024 for enabling dialogue between civil society and policy makers from the region and for sharing approaches to decriminalization among parliamentarians and policy makers. But some were concerned that national strategies in many countries in eastern Europe and central Asia show little recognition of the need to decriminalize the key populations most affected by HIV in the region – people who inject drugs, sex workers and men who have sex with men. Some survey respondents and key informants also expressed concern about the low profile of harm reduction as an advocacy issue at AIDS 2024.

"We still need greater engagement with policy makers in the region to follow through on the needs of key populations and the decriminalization agenda. We can't just return to focus on the region every six or eight years – the focus must be consistent. This is the region where HIV remains far out of control!"

Key informant, international agency

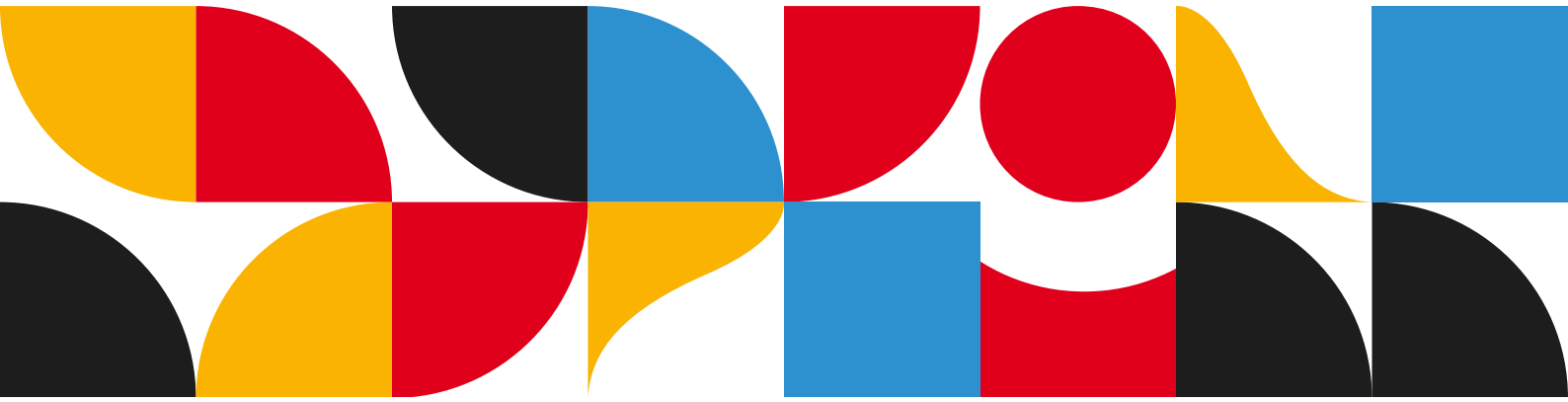
"Everyone talks about the need to pay more attention to the eastern Europe and central Asia region, although in practice we don't see any concern, capacity building and visibility at the global level beyond Ukraine."

Survey respondent

How can we do better next time?

A greater focus on solutions

Delegates frequently requested less focus on gaps and more emphasis on solutions when commenting on future conference topics and structure. Key informants agreed that although the global HIV research agenda requires the identification of gaps in the response in order to define the critical questions that must be answered, conferences can run the risk of restating problems in especially challenging areas. This has been especially true for stigma and discrimination, several key informants noted, where a sustained focus on the most effective tools for combatting stigma is needed.



A greater focus on mental health and the behavioural and psychosocial context of HIV prevention technologies

Delegate survey respondents were more likely to request that future conferences address mental health as an aspect of HIV care than any other topic. Delegates were especially interested in learning more about how mental healthcare can be integrated into existing models of HIV care and how mental health interventions can support adherence. Key informants highlighted the behavioural and psychosocial context in which new HIV prevention technologies will be adopted. They emphasized the need for greater understanding of how mental health may affect perceptions and adoption of new HIV prevention tools among young people in key and vulnerable populations.

Visa facilitation for future conferences

Many delegates commented that conferences should always be held in countries without visa barriers to attendees from countries most affected by HIV. The willingness and administrative capacity of potential host nations to facilitate the attendance of delegates should continue to be one of the criteria used when choosing future conference venues while recognizing that safety, venue capacity, legal environment, independence and viability of the conference are also essential for ensuring a successful and inclusive conference.

A conference app

Delegates would like to see a conference app at future meetings that can be used to navigate sessions, plan session attendance, locate session rooms and find posters of interest. Delegates found the conference platform difficult to use on phones.

References

[1] UNAIDS. The urgency of now: AIDS at a crossroads. 2024 Global AIDS Update. July 2024. https://crossroads.unaids.org/

[2] E Lamontagne. The cost of inaction of failing to meet global targets to end the AIDS epidemic: looking beyond 2030. Poster exhibition, Track E poster WEPEE579. AIDS 2024.

[3] UNAIDS. The urgency of now: AIDS at a crossroads. 2024 Global AIDS Update. July 2024. https://crossroads.unaids.org/

[4] Founding declaration of the Global Parliamentary Platform on HIV and AIDS, 24 July 2024. https://stopaids.org.uk/wp-content/uploads/2024/07/Declaration-to-be-signed-at-IAC-2024-FINAL.docx.pdf024.

[5] C Gaebler. The next Berlin patient: sustained HIV remission surpassing five years without antiretroviral therapy after heterozygous CCR5 WT/?32 allogeneic hematopoietic stem cell transplantation. Special session oral abstract SS0402LB. AIDS 2024.

[6] Sáez-Cirión A. Absence of viral rebound for 20 months without antiretrovirals after allogeneic hematopoietic stem cell transplantation with wild-type CCR5 donor cells to treat a biphenotypic sarcoma. Oral abstract Track A: OALBA0504. IAS 2023.

[7] International AIDS Society press release, "World's seventh HIV cure case following stem cell transplant among scientific highlights at AIDS 2024",18 July 2024. https://www.iasociety.org/news-release/worlds-seventh-hiv-cure-case-following-stem-cell-transplant-among-scientific

[8] M Ott. The sound of silence: Tackling HIV transcription to achieve remission. Plenary presentation: PL0402.

[9] The different flavours of gene therapy for HIV cure. Symposium session: SY26. AIDS 2024.

[10] R Presti. CRISPR clinical trial with EBT-101 for HIV (using Excision therapeutics). Track A symposium: SY26. AIDS 2024

[11] The different flavours of gene therapy for HIV cure. Symposium session: SY26. AIDS 2024.

[12] V Klastrup. Factors influencing time to viral rebound during analytical treatment interruptions in HIV cure trials. Oral abstract Track A: OAA0206LB. AIDS 2024.

[13] D Sok. HIV vaccines: Where are we now and what does the future look like? Plenary session PLO3. AIDS 2024.

[14] L Corey. Two Randomized Trials of Neutralizing Antibodies to Prevent HIV-1 Acquisition. New Engl J Med, 2021. 384: 1003-14.

[15] G Gray, N Mkhize. Responses of neonates to candidate HIV vaccines. Symposium session: SY41. AIDS 2024.

[16] T Caniels. Updates on germline priming by immunization: Trimers, epitopes or both? Symposium session: SY41. AIDS 2024.

[17] A Turkova. Do not forget the children. Pioneering progress in paediatric HIV care. Plenary presentation: PL0101. AIDS 2024.

[18] T Silere-Maqetseba. Universal HIV testing of children at 18 months of age in South Africa; a novel policy as the last mile to close the pediatric case finding towards HIV epidemic control. Oral abstract Track B: OAB2106LB. AIDS 2024.initiation and retention, and 12-month viral suppression—the Ekkubo study: a cluster randomized trial in Uganda. Oral abstract Track C: OAC0302. IAS 2023.

[19] A Turkova. Do not forget the children. Pioneering progress in paediatric HIV care. Plenary presentation: PL0101. AIDS 2024.

[20] A Gaur. Long-acting cabotegravir (CAB) plus rilpivirine (RPV) in the first, virologically-suppressed adolescents with HIV-1 to receive an every 8-week, all-injectable regimen in a multicenter, multinational Study: IMPAACT 2017 week 48 outcomes. Oral abstract Track B: OAB2606LB. AIDS 2024.

[21] P Ryan. Non-inferior efficacy and less weight gain when switching to DTG/3TC than when switching to BIC/FTC/TAF in virologically suppressed people with HIV (PWH): the PASO-DOBLE (GeSIDA 11720) randomized clinical trial. Oral abstract Track B: OAB3606LB. AIDS 2024.

[22] K Mounzer. Efficacy and safety of bictegravir plus lenacapavir: 48-week outcomes in virologically suppressed people with HIV-1 on complex antiretroviral regimens at baseline. Oral abstract Track B: OAB2602.

[23] P Chan. WHO 2024 updated HBV guidelines and policy. Viral hepatitis: Not gone, not forgotten. Symposium session: SY09. AIDS 2024. https://plus.iasociety.org/webcasts/viral-hepatitis-not-gone-not-forgotten

[24] World Health Organization. Guidelines for the prevention, diagnosis, care and treatment of people with chronic hepatitis B infection. March 2024. https://www.who.int/publications/i/item/9789240090903

[25] Grinspoon S. Pitavastatin to prevent cardiovascular disease in HIV infection. NEJM, published online, 24 July 2023. https://doi.org/10.1056/NEJMoa2304146

[26] M Siedner. How to integrate CVD prevention in HIV care in LMICs. Symposium session: SY053. AIDS 2024.

[27] M Siedner. How to integrate CVD prevention in HIV care in LMICs. Symposium session: SY053. AIDS 2024.

[28] M Siedner. How to integrate CVD prevention in HIV care in LMICs. Symposium session: SY053. AIDS 2024.

[29] Y Liu. The effectiveness of different anal cancer screening strategies for people living with HIV/AIDS. Oral abstract Track B: OAB0102. AIDS 2024.

[30] Guidelines for managing advanced HIV disease and rapid initiation of antiretroviral therapy, July 2017. Geneva: World Health Organization; 2017 https:// iris.who.int/handle

[31] A Nuwagira. Improving advanced HIV disease identification among clients failing antiretroviral therapy: an implementation partner-led initiative in Uganda. Oral abstract Track E: OAE0402. AIDS 2024.

[32] A Camiro-Zuñiga. Cost-effectiveness simulation of implementing a point-of-care test package for opportunistic infections for people with advanced HIV in Mexico City's reference centres: preliminary analysis of the PREVALIO-CDMX study. Oral abstract Track E: OAE0403. AIDS 2024.

[33] M Feser. Clinical impact and cost-effectiveness of improving access to cryptococcal meningitis diagnostics and treatment in Malawi. Oral abstract Track E: OAE0404. AIDS 2024.

[34] A Avihingsanon. Pharmacokinetics and HIV viral load suppression of one month-daily rifapentine and isoniazid (1HP) for tuberculosis preventive therapy among adults with HIV taking standard dolutegravir based regimens. Oral abstract Track B: OAB1702.

[35] R Rajasingham. The global burden of HIV-associated cryptococcal infection in adults in 2020: a modelling analysis. Lancet Inf Dis, 12 (2022): 1748-55.

[36] E Nalintya. Single-dose liposomal amphotericin to prevent meningitis in HIV-associated cryptococcal antigenemia with low serum Crag titers. Oral abstract Track B: OAB1704. AIDS 2024.

[37] E Nalintya. Single-dose liposomal amphotericin to prevent meningitis in HIV-associated cryptococcal antigenemia with low serum Crag titers. Oral abstract Track B: OAB1704. AIDS 2024.

[38] L-G Bekker. Twice-Yearly Lenacapavir or Daily Emtricitabine/Tenofovir Alafenamide for HIV Prevention in Cisgender Women: Interim Analysis Results from the PURPOSE 1 Study. Cross-track oral abstract LB**. AIDS 2024.

[39] L-G Bekker. Twice-Yearly Lenacapavir or Daily F/TAF for HIV Prevention in Cisgender Women. N Engl J Med, published online 24 July 2024.

[40] International AIDS Society press release, "Statement from IAS President Sharon Lewin on full results from PURPOSE 1 trial of twice-yearly injectable lenacapavir for HIV prevention", https://www.iasociety.org/news-release/statement-ias-president-sharon-lewin-full-results-purpose-1-trial-twice-yearly

[41] E Irungu. PrEP implementation in low- and middle-income countries: Challenges and opportunities. Plenary presentation: PL0302. AIDS 2024

[42] E Irungu. PrEP implementation in low- and middle-income countries: Challenges and opportunities. Plenary presentation: PL0302. AIDS 2024

[43] E Irungu. PrEP implementation in low- and middle-income countries: Challenges and opportunities. Plenary presentation: PL0302. AIDS 2024

[44] Simplifying PrEP: is monitoring needed? Symposium session: SY27. AIDS 2024.

[45] World Health Organization. Consolidated guidelines on differentiated HIV testing services. July 2024. https://www.who.int/publications/i/item/9789240096394

[46] R Shaefer. Kidney function in tenofovir disoproxil fumarate-based oral pre-exposure prophylaxis users: a systematic review and meta-analysis of published literature and a multi-country meta-analysis of individual participant data. Lancet HIV, 2022. 9(4): e242-e253.

[47] P. Ong'wen. Uptake of HIV post-exposure prophylaxis (PEP) in private retail pharmacies in Kenya: early findings from the Pharm PrEP study. Oral abstract Track E: OAE1202. AIDS 2024.

[48] SD Roche. Pharmacy-based delivery of long-acting injectable PrEP in Kenya: provider, client, and key stakeholder perspectives on potential challenges and opportunities. Oral abstract Track E: OAE1204. AIDS 2024.

[49] M Groot Bruinderink. STI testing rates among PrEP users randomized to 3-monthly (standard of care) or 6-monthly monitoring within the EZI-PrEP trial, the Netherlands: preliminary results. Oral abstract Track E: OAE3902. AIDS 2024.

[50] L Mulenga. Early HIV infection diagnostic challenges in injectable long-acting cabotegravir implementation in routine public health PrEP service in Zambia. Oral abstract Track C: OAC2206LB.

[51] L Mulenga. Early HIV infection diagnostic challenges in injectable long-acting cabotegravir implementation in routine public health PrEP service in Zambia. Oral abstract Track C: OAC2206LB.

[52] S Delany-Moretlwe. Initial evaluation of injectable cabotegravir (CAB-LA) safety during pregnancy in the HPTN 084 open-label extension. Symposium presentation: SY2503. AIDS 2024.

[53] T Grennan. A pilot, randomized controlled trial of doxycycline pre-exposure prophylaxis versus placebo for prevention of bacterial sexually transmitted infections in men who have sex with men living with HIV. Late-breaker poster LB11. AIDS 2024.

[54] S Abe. Doxycycline PrEP prevents STIs without affecting vaginal bacterial flora in female sex workers. Oral abstract Track C: OAC0803. AIDS 2024.

[55] S Kuchukidze. The impact of intimate partner violence to vertical HIV transmission: A modelling analysis of 42 countries in Sub-Saharan Africa. Oral abstract Track C: OAC2205. AIDS 2024.

[56] O Gvozdetska. Integrated HIV, tuberculosis and viral hepatitis programming. Plenary presentation: PL0103. AIDS 2024.

[57] R Ivasiy. The Impact of Russia's War in Ukraine on Opioid Agonist Treatment (OAT) Services, a Primary HIV Prevention Strategy among People Who Inject Drugs (PWID). Oral abstract Track C: OAC2906LB. AIDS 2024.

[58] O Gvozdetska. Integrated HIV, tuberculosis and viral hepatitis programming. Plenary presentation: PL0103. AIDS 2024.

[59] R Poverga. Automated 24/7 dispensing of HIV prevention goods and self-tests via vending machines. Co-Chairs' Choice abstract: SS0406LB. AIDS 2024

[60] R Poverga. Automated 24/7 dispensing of HIV prevention goods and self-tests via vending machines. Co-Chairs' Choice abstract: SS0406LB. AIDS 2024

[61] E Machavariani. Integrating HIV, tuberculosis and addiction treatment services in primary care clinics in Ukraine: two-year outcomes from a randomized controlled trial. Oral abstract Track E: OAE2006LB.

[62] S Mukherjee. Are countries allowing communities to lead? The global landscape of national civil society laws and their association with HIV 95-95-95 indicators. Oral abstract Track F: OAF0306LB. AIDS 2024.

[63] S Kuchukidze. Community-level HIV stigma and discrimination's impact on HIV testing, treatment uptake, and viral load suppression in 33 African countries: a pooled analysis of 76 nationally representative surveys (2000-2022). Oral abstract Track F: OAF1106LB. AIDS 2024.

[64] S Kuchukidze. Community-level HIV stigma and discrimination's impact on HIV testing, treatment uptake, and viral load suppression in 33 African countries: a pooled analysis of 76 nationally representative surveys (2000-2022). Oral abstract Track F: OAF1106LB. AIDS 2024.

[65] T Noori. Unveiling the hidden truth: HIV-related stigma and discrimination among European healthcare workers. Track oral abstract: OAD3206LB. AIDS 2024.

[66] IAS statement: Upsurge in anti-gay laws across Africa threatens the HIV response. https://www.iasociety.org/ias-statement/upsurge-anti-gay-laws-across-africa-threatens-hiv-response

[67] T Engwau. Sustaining KP service delivery in harsh legal push-back environments among LGBTQ populations in Uganda amidst the 2023 anti-homosexuality act (AHA). Oral abstract Track F: OAF20706LB. AIDS 2024.

[68] YC Mensah. Promoting access to HIV services among men-who-have-sex-with-men under a harsh environment in the wake of the anti-LGBTQ+ debate in Ghana. Oral abstract Track F: OAF2702. AIDS 2024.