

Pediatric HIV and AIDS: Global Perspectives

Faculty:

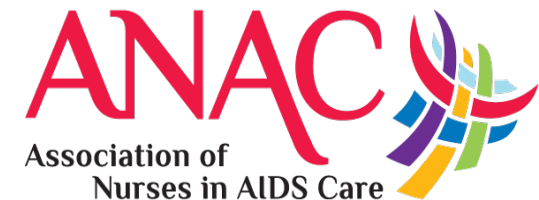
Hilary Wolf, MD

Ruth Nduati, MBChB, MD, MPH

Moderator:

Carole Treston, RN, MPH, ACRN, FAAN

April 13, 2023



The Association of Nurses in AIDS Care (ANAC)

Mission: ANAC fosters the professional development of nurses and others involved in the delivery of health care for persons at risk for, living with and/or affected by the human immunodeficiency virus (HIV) and its comorbidities. ANAC promotes the health, welfare and rights of people living with HIV around the world.

Nursing Continuing Professional Development (NCPD)

ANAC will provide one contact hour of NCPD on completion of this activity.

To receive a certificate of completion, attendees must:

- Be registered to attend
- View today's webinar presentation in its entirety
- Complete the online, post-activity evaluation. You will receive a link to the evaluation by email.

The deadline to claim contact hours is December 31, 2023.



ANAC is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation.

NCPD questions? Email Sheila@anacnet.org



Learning Outcomes

At the conclusion of today's activity, participants will be able to:

- Describe the current situation of HIV/AIDS in infants and children ages 0-14 across the globe.
- Identify the reasons for the gaps in effective treatment of pediatric AIDS globally.
- Discuss current and planned solutions and timeline to address the gaps globally

Housekeeping

- This webinar is being recorded
- Your lines will be muted during the webinar
- Type questions in the “Question” or “Chat” pane of your dashboard
- There will be a Q & A session at the end of the webinar



Faculty



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PEPFAR
20 YEARS OF IMPACT

Pediatric HIV/AIDS – A Global Perspective

Hilary Wolf, MD

Care and Treatment Team lead, Senior Advisor for Pediatric Care and Treatment

US Department of State

Agenda

- What are the gaps?
- PEPFAR's AP3 (Accelerating Progress in Pediatrics/PMTCT) Effort
- Global Alliance to End AIDS in Children
- ART Optimization
- Ending Preventable Deaths in Children

What are the Gaps?



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Progress for children has been stalling and there are stark inequities

- **We are off target to ending AIDS by 2030**

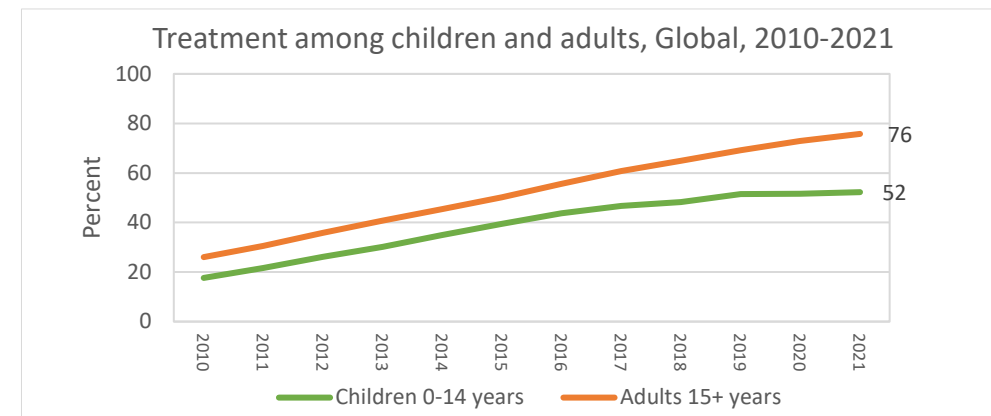
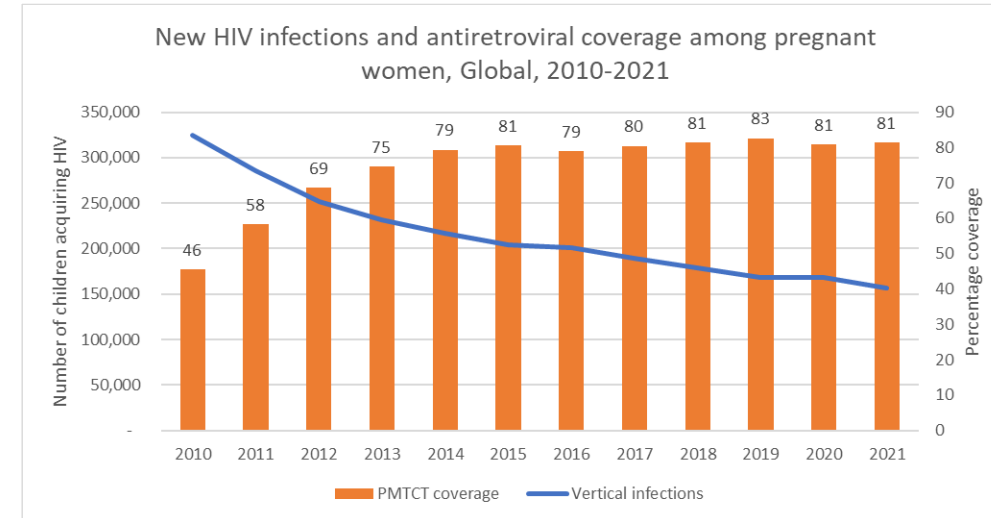
- Annually, 160,000 new child (0-14) HIV infections and 160,000 in adolescents (10-19)
- 1.68M children (0-14) living with HIV and 1.58M adolescents (10-19)

- **Decline in new infections in children is off track**

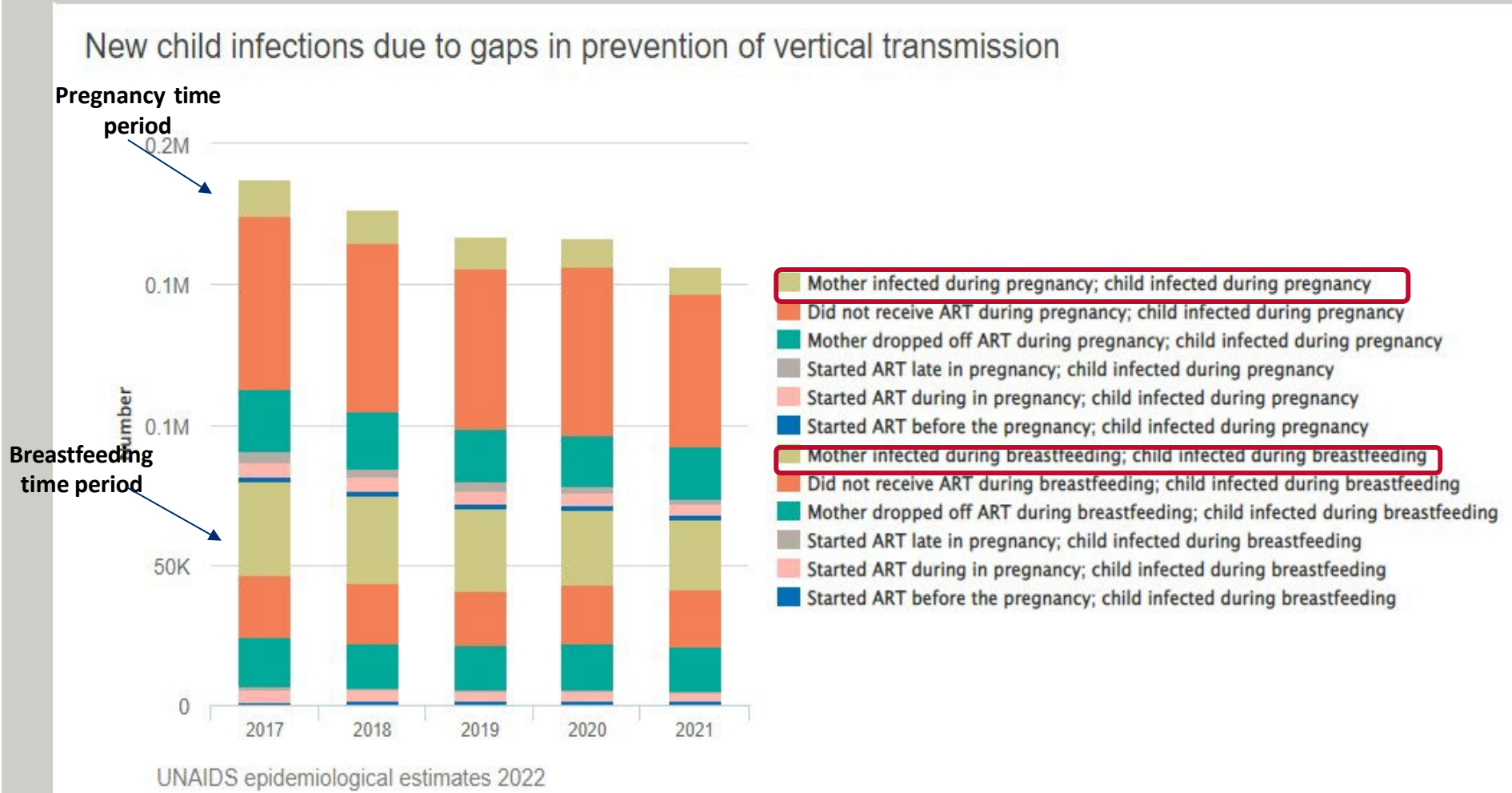
- New infections have reduced by 52%
- Maternal ART coverage in 2021 was 81% and has been stagnant since 2015
- New reality related to retention in care and newly acquired infections during pregnancy and breastfeeding

- **Treatment inequity among children and adolescents**

- Only 52% of children and 60% of adolescents are receiving ART compared with 76% of adults and 81% in pregnant women
- An estimated 800,000 children 0-14 years and 400,000 adolescents 15-19 years are not on treatment



Incident Maternal Infections Are A Driver of Vertical Transmission



Total new child infections
in 2021 = **160,000**

Light green bars account for incident maternal infections during pregnancy and breastfeeding

9,714 (pregnancy) +
24,803 (breastfeeding) =
34,517

22% of total new child infections due to maternal incident infection during pregnancy / breastfeeding

Half of new pediatric infections occur after the first 6 weeks of life

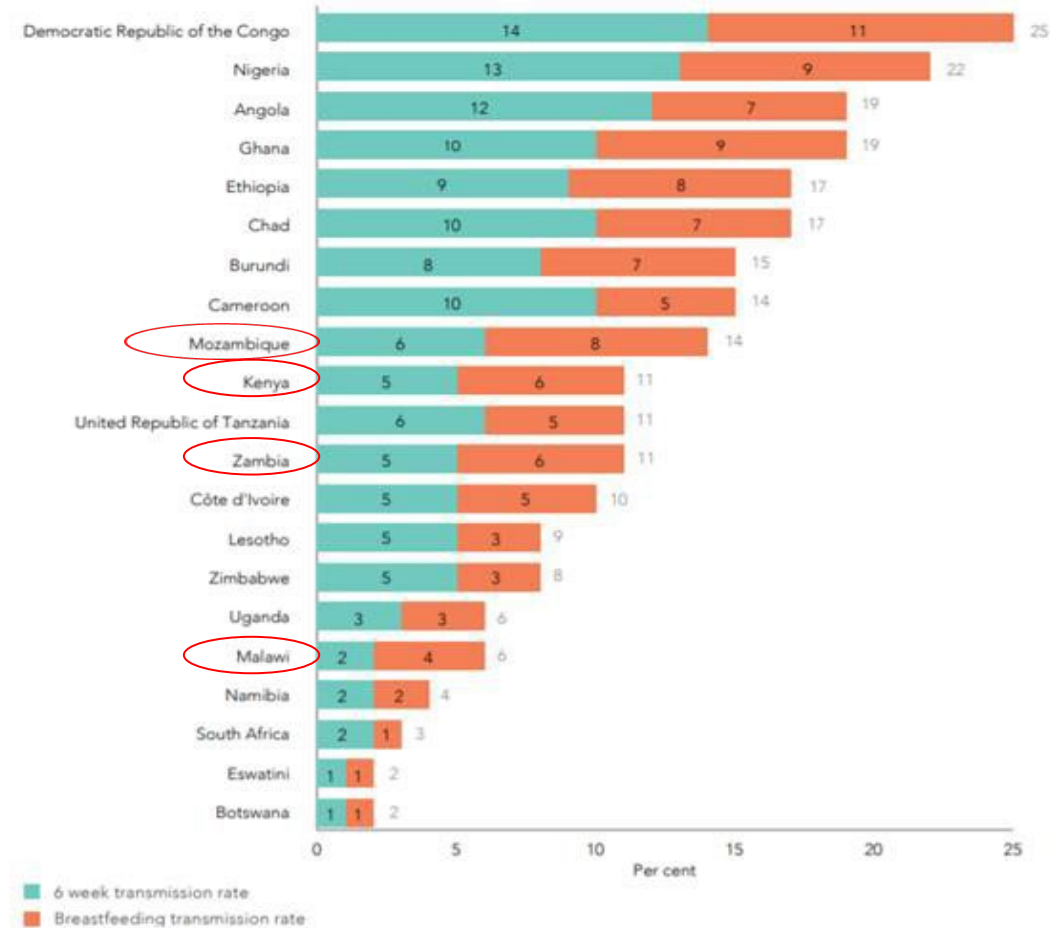
Some countries have a higher post-6 week transmission rate, which indicates a substantial amount of transmission during breastfeeding*



*WHO recommends HIV-positive women breastfeed exclusively for first 6 months, and continue breastfeeding for at least 12 months, up to 24 months or longer while being supported with ART adherence.

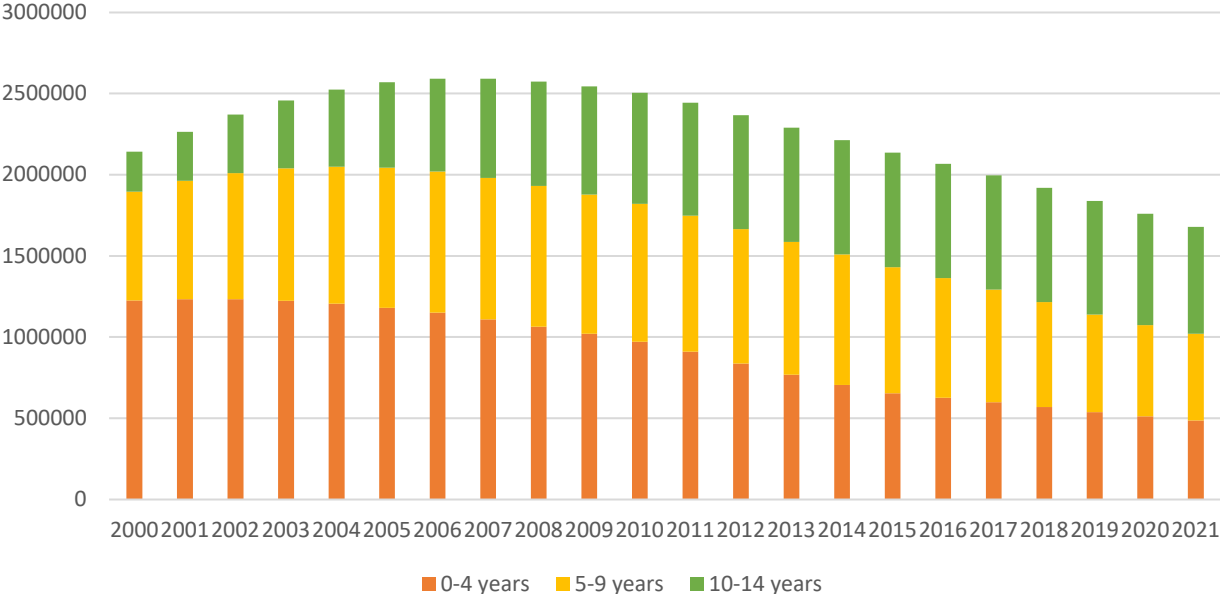
- Many women may have close to **3 years of pregnancy and breastfeeding (9 months pregnancy, 2 years breastfeeding) and risk of transmitting HIV to their children.**

Figure 4. Six-week vertical transmission rate and final transmission rate in the focus countries, 2019

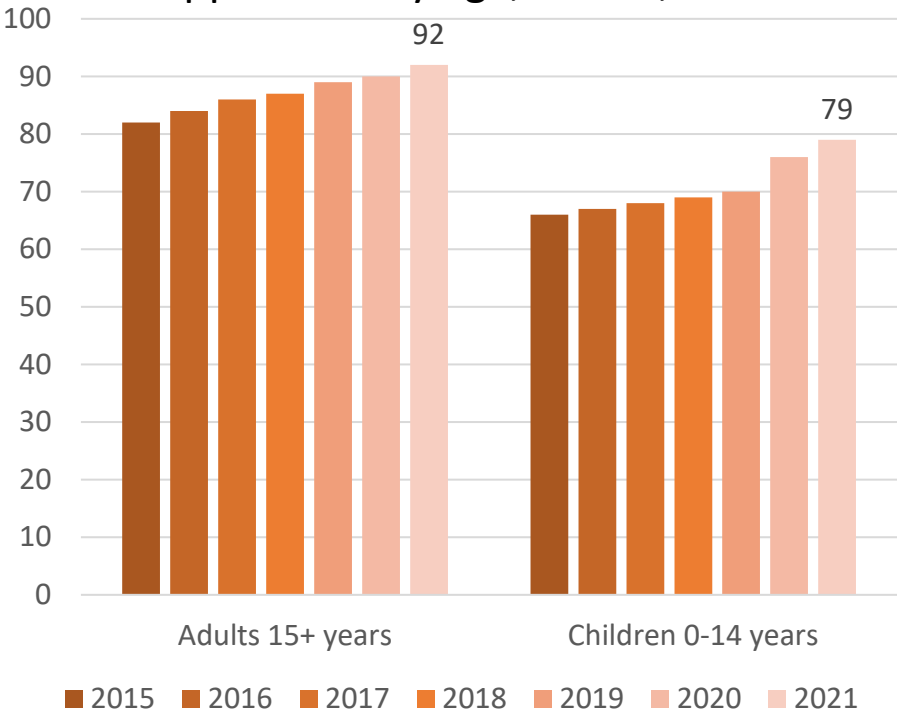


CLHIV by age and lagging VLS for children <15 years

Children living with HIV by age, Global, 2010-2021



Among people receiving treatment, the percent with viral suppression by age, Global, 2015-2021

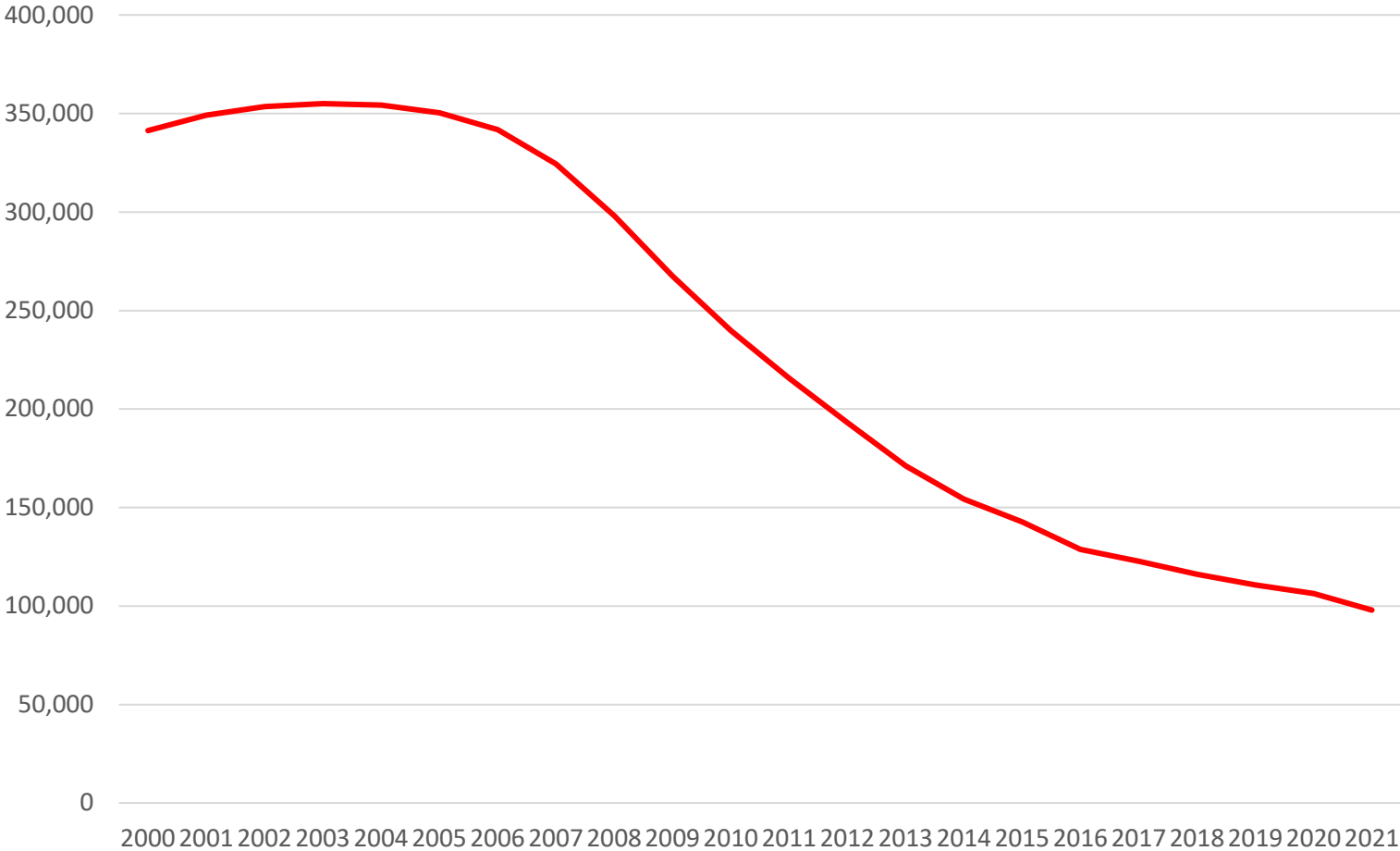


Source: UNAIDS 2022 epidemiological estimates



AIDS deaths among children

AIDS deaths among children 0-14 years, global, 2000-2021



Source: UNAIDS 2022 estimates



Accelerating Progress in Pediatrics/PMTCT (AP3)



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AP3 Overview

UNAIDS 2020 Estimates	Transmission percentage	Number of new infections <15	Number of Children not on Treatment	% of CLHIV receiving treatment	% of Children with VLS
DRC	28%	8,800	49,331	31%	
Nigeria	25%	21,000	72,555	45%	31%
Mozambique	13%	13,000	46,918	64%	36%
South Africa	4%	12,000	161,570	47%	33%
Tanzania	11%	10,000	48,463	54%	
Uganda	6%	5,300	36,250	63%	49%
Zambia	13%	8,300	34,497	58%	48%

AP3 Objectives:

1. Reduce new child infections in children <10 years through addressing gaps in the PMTCT program
2. Rapid identification, linkage, and treatment of children/adolescents not yet on ART to increase coverage.
3. Increase rates of pediatric viral load suppression to 95% and reduce mortality.

AP3 Framework

- Plan for sufficient dedicated Pediatrics and PMTCT **human resources** to reach goals/targets
- **Expenditure analysis and budget planning** for pediatrics and PMTCT with existing budget and ER codes to ensure that adequate resources are put towards achieving PMTCT and pediatric targets.
- **Strengthen monitoring and evaluation** of Pediatrics and PMTCT programs



- **Community-led monitoring** focused on peds (pCLM) to track and ensure accountability for child and family-centered care
- **Case management and socio-economic support** via OVC provided to mothers of HEI and CALHIV most at risk of poor outcomes
- Dedicated, regular **program reviews** for pediatrics/PMTCT

AP3 Pediatric Surge Interventions

Site level MCH focal points/Pediatric Champions

Caregiver DOTS model for unstable children

Dedicated Pediatric clinical staff (i.e. community testers/mobilizer, facility counselors/testers, ART case managers)

Support surge data and reporting at national level

PMTCT/Adolescent/Pediatric mentoring

Scale social network testing (SNS) for high-risk adolescent networks

AP3 PMTCT Surge Interventions

Expanded community testing and treatment models to increase PMTCT uptake

PMTCT programming for displaced HIV+ PBFW, including enhanced case management models

Expand retesting and PrEP for PBFW

Data systems innovations (i.e., use of digital technology to improve PMTCT case-based management)

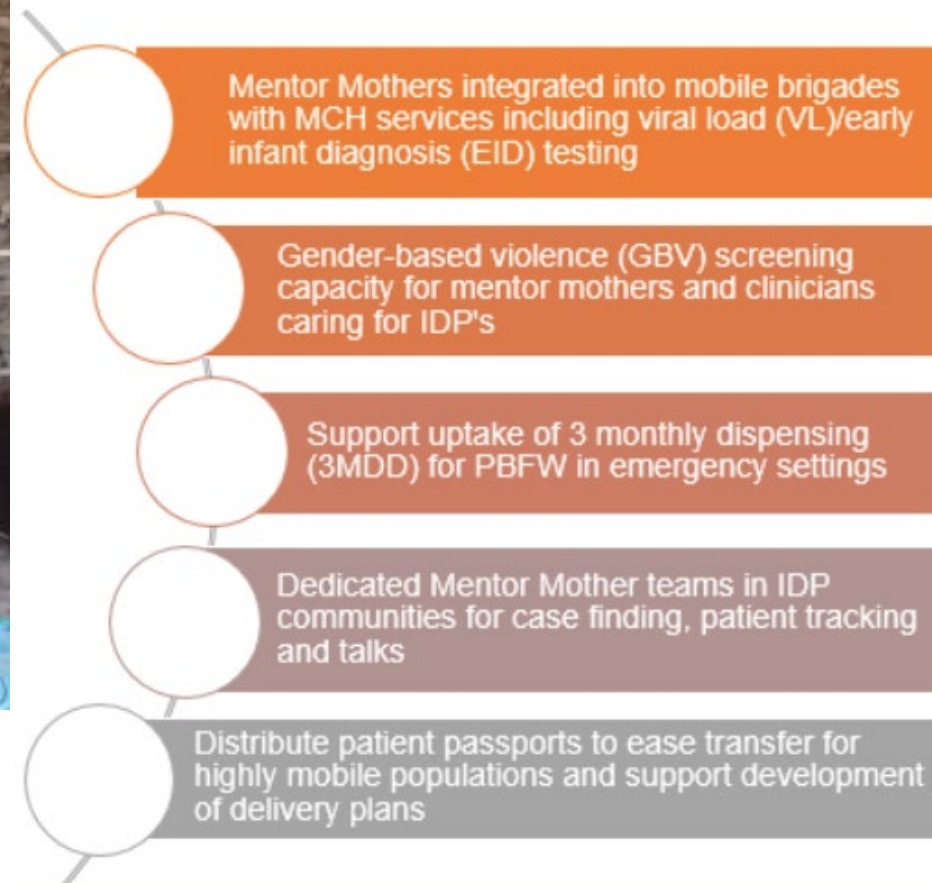
Strengthen PMTCT data completeness/ quality to identify and close PMTCT gaps

Focus on EID coverage using client-level audit data to identify and address site level gaps

HRH: Mozambique's strategy to employ Mentor Mothers in IDP camps



Community household visits, to support adherence and viral load monitoring, Metuge (source: m2m)



- Mothers2mothers (m2m) trained and employed 21 Internal Displaced Women as Mentor Mothers across 8 high volume IDP camps
- This activity was started through ARPA funding and expanded upon in COP22 for AP3 efforts
- The number of pregnant women attending ANC with known HIV status and HEI receiving EID increased after the deployment of Mentor Mothers

Global Alliance to End AIDs in Children by 2030



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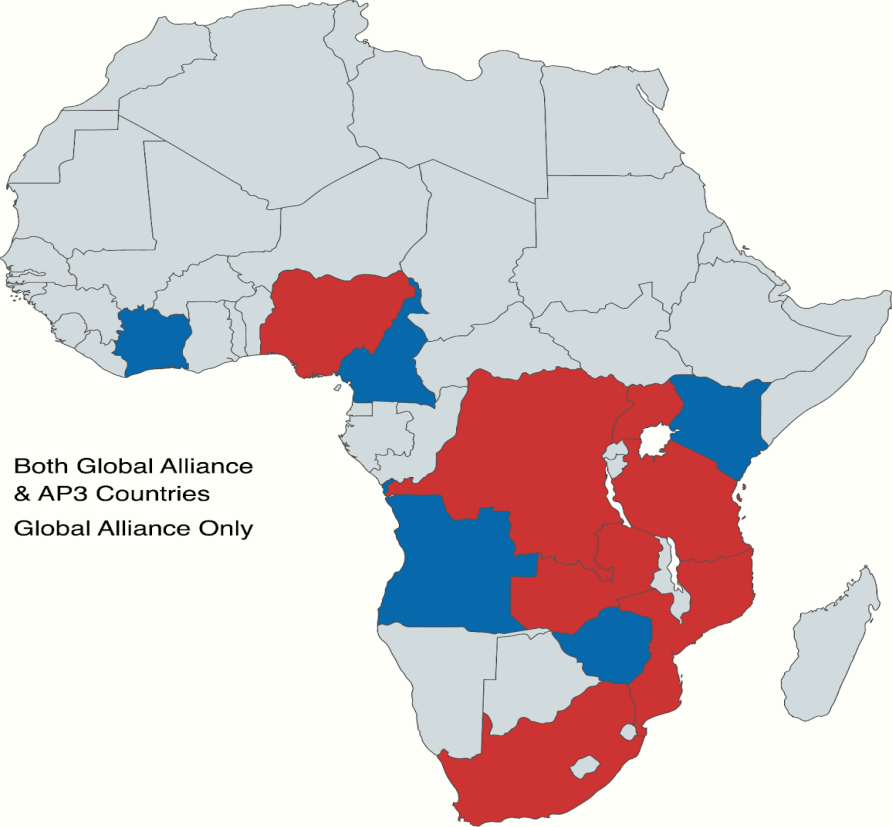
Global Alliance Activities to Date

- **August 2022:** Official Launch at IAS 2022
- **September 2022:** On-boarding and Global Alliance Country Consultations
- **October-January 2023:** Action Plan development; Peer Review of GA Action plans
- **January 31st-Feb 1st, Dar Es Salaam, Tanzania:** Political Launch of the Global Alliance
 - Technical Meetings (12 Countries)
 - Ministerial Meeting
 - “Dar Es Salaam Declaration”
- **Next Steps:** Dashboard Development, Accountability Frameworks, Country Coordination for implementation



Global Alliance & AP3 Countries

- South Africa
- Mozambique
- Uganda
- Tanzania
- DRC
- Zambia
- Nigeria



- Kenya
- Zimbabwe
- Angola
- Cameroon
- Cote d'Ivoire

Created with mapchart.net



The Global Alliance is the successor to the Global Plan and the 3-Frees

A 9-year global strategic initiative in 3-year phases with the goal of ending AIDS in Children by 2030

PILLARS

- I. **Early testing and comprehensive, high-quality treatment & care** for children and adolescents living with HIV and perinatally exposed children
- II. **Closing the treatment gap and optimizing continuity of treatment** for pregnant and breastfeeding women living with HIV
- III. **Preventing new HIV infections** among pregnant and breastfeeding women
- IV. **Addressing rights, gender equality, and the social & structural barriers** that hinder access

POPULATIONS

- I. **Children (0-14 years) and Adolescents (15-19 years) Living with HIV**
- II. **Children perinatally exposed to HIV**
- III. **Pregnant and Breastfeeding Girls and Women who are Living with HIV** including marginalized and key populations
- IV. **Pregnant and Breastfeeding Girls and Women who are HIV-negative but at risk of HIV**

ART Optimization



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Historically lack of optimal ART regimens for children

- For years limited availability of optimal ART regimens for C/ALHIV relative to the simplified, well-tolerated, once-daily, single tablet regimens that became the norm for adults years ago
- Over the past 10 years global stakeholders have coordinated to develop and make available age-appropriate optimal ARV formulations for CLHIV in LMIC
- ARV Optimal formulary, WHO-led Paediatric Antiretroviral Drug Optimization (PADO) process and the Global Accelerator for Pediatric formulations (GAP-f) have reduced market fragmentation and established medium- and long-term priorities for drug development in children.

<https://www.who.int/publications/i/item/9789240023529>

<https://www.who.int/groups/antiretroviral-drug-optimization>

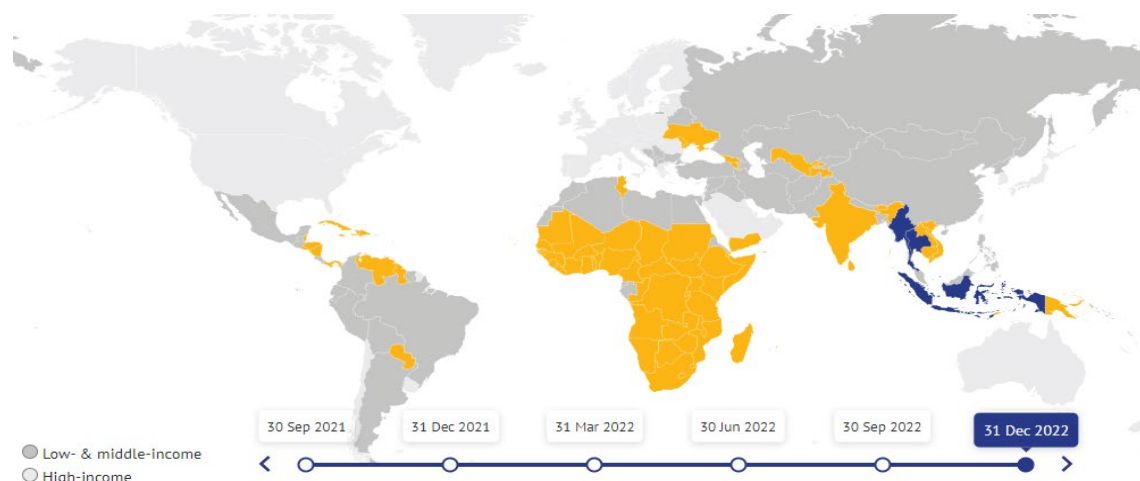
<https://www.who.int/initiatives/gap-f>



Core Standard for Pediatric Treatment

- Offer **DTG-based regimens** (in accordance with WHO guidance) to all people living with HIV, including adolescents, women of childbearing potential, and **children**.
 - *Current approval of **DTG 10 mg Dispersible Tablet (DT)** is down to 4 weeks of age and older and 3 kg, but safety studies are underway for newborns*

Pediatric DTG supplied in 73 countries

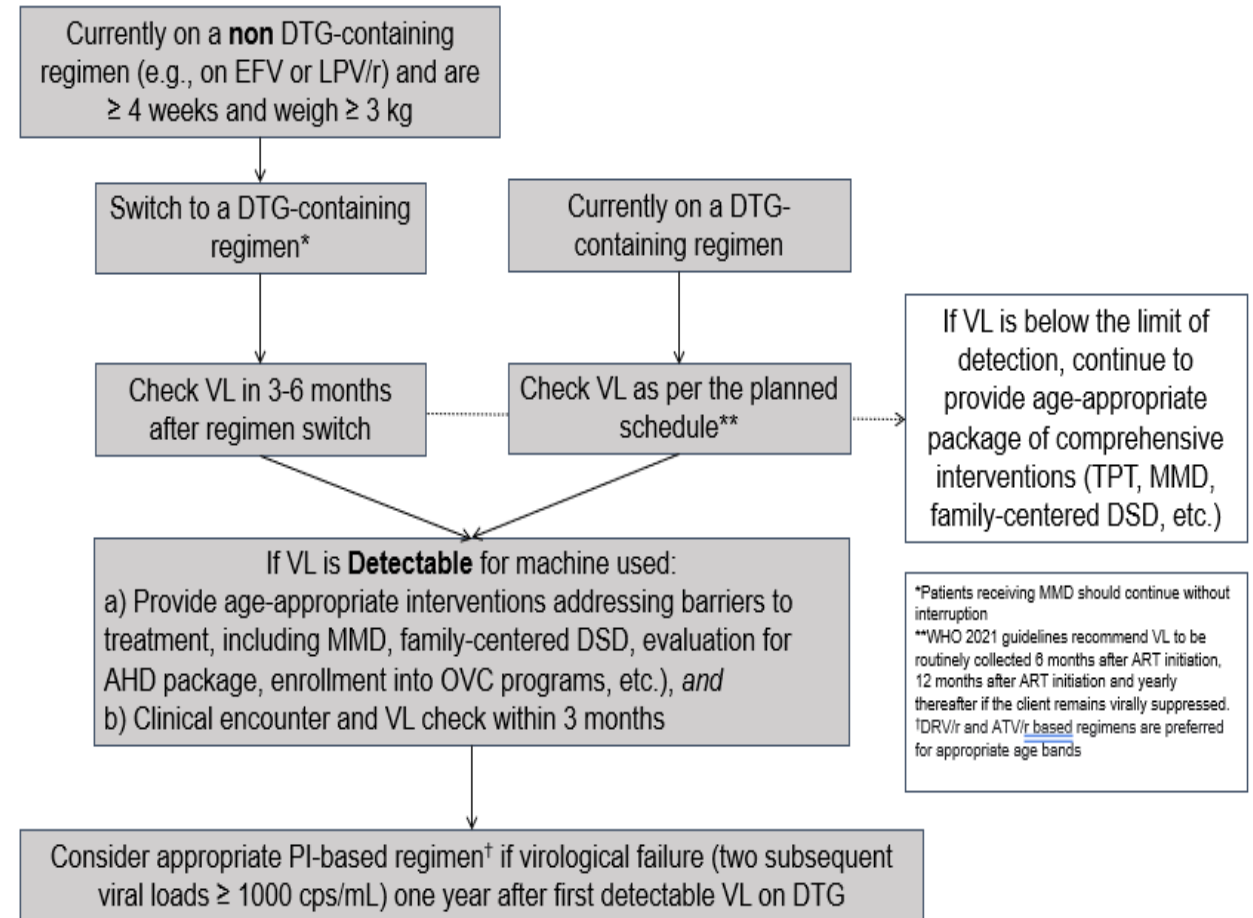


This information was supplied by MPP and can be access here: <https://medicinespatentpool.org/progress-achievements/access-to-medicines-tracker#Interactive-Map/>.

All drugs combined with ABC/3TC 120/60 mg, #30	3.0 to 5.9 kg	6.0 to 9.9 kg	10.0 to 13.9 kg	14.0 to 19.9 kg
LPVr 80/20 mg/mL oral solution, 60 mL	\$ 85.23	\$ -	\$ -	\$ -
LPVr 40/10 mg pellets, 120 capsules	\$ 164.70	\$ 299.70	\$ 439.20	\$ 549.00
LPVr 40/10 mg granules, 120 capsules	\$ 193.95	\$ 387.90	\$ 517.20	\$ 646.50
LPVr 100/25 mg HST, 60 heat stable tablets	\$ -	\$ -	\$ 205.20	\$ 267.00
DTG 10 mg Disp Tablets, 90 tablets	\$ 46.42	\$ 101.16	\$ 134.88	\$ 168.60

Treatment for CLHIV with Virologic Failure

- A protease-inhibitor based regimen is recommended for children who are unable to achieve virologic suppression (2 subsequent VL's ≥ 1000) one year after first detectable VL on DTG
- For infants <3 years of age, the LPVr 40/10 mg granules are the preferred product.
- For children that are at least 3 years of age, the preferred protease inhibitor is DRV/r 120/20 mg.



Opportunities to Address Challenges to HIV Treatment for Children

- Finish the job for pDTG uptake
- Introduction of New optimal ARV formulations i.e., dispersible ALD and DRV/r (transition plans/policy updates, registration, uptake)
- Improve Access to optimal products for low burden countries and access to low volume products
- Improve access to PNP and neonatal treatment

- Improve forecasting collaboration between clinical and supply chain partners
- Improve stock out management and last mile distribution using early warning systems
- Plan for transition forecasting

Introduction
and Access to
New
Medicines

Forecasting/
Distribution
and Delivery

- Roll out ART initiation, management and drug pick up outside facility
- Prioritize activities that address preventable mortality in CLHIV (i.e, CTX prophylaxis)

Family
centered
service
delivery

Monitoring
Safety and
Effectiveness
Data

- Create data partnership to monitor safety and effectiveness of ARVs
- Unified data systems that allow for monitoring VL by regimen across country data platforms
- National HIVDR survey on HIV exposed infants

Ending Preventable Deaths in Children



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Ending Preventable Deaths in Young CLHIV

- CLHIV < 5 years experience disproportionately high mortality compared to all other ages
- Collaborating with partner-country governments to support mortality surveillance systems and continuous quality improvement (CQI) death audits that include cause of death
- Improving longitudinal monitoring of mother-baby pairs through individual level data—simultaneously ensuring infants are clinically managed individually
- Ensuring malnourished children, especially in the first 6 months of ART initiation, receive nutritional supplementation.
- De-stigmatizing HIV in primary pediatric health care settings.
- Implementing the STOP AIDS WHO package of care for all children with advanced HIV disease (AHD) and planning/forecasting with all stakeholders appropriate AHD commodities, especially cotrimoxazole,
- Providing intensive case-management services for all children living with HIV and their families who are newly initiating ART; such case management should last until viral suppression is achieved.

THANK YOU!



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Reflections on Paediatric HIV – the Kenya experience

Ruth Nduati, MBCHB, MMED, MPH

Professor of Pediatrics and Childhealth

University of Nairobi

Objective

- Brief statement on current status of pediatric HIV in Kenya
- Challenges of new infections
- Identification of HIV infected child
- Retention in care of HIV exposed children until diagnosis
- Sick mother-sick child dyad

Who is a child and what does it mean for HIV



Infants

Prevention of infection
Early diagnosis
Early ART initiation

Kenyan Law – You are a child until you achieve 18 years of age –

3 cohorts emerge

Infants

School age children

Adolescents & Young people



School age Children

Diagnosis
Retention in care
Drug adherence

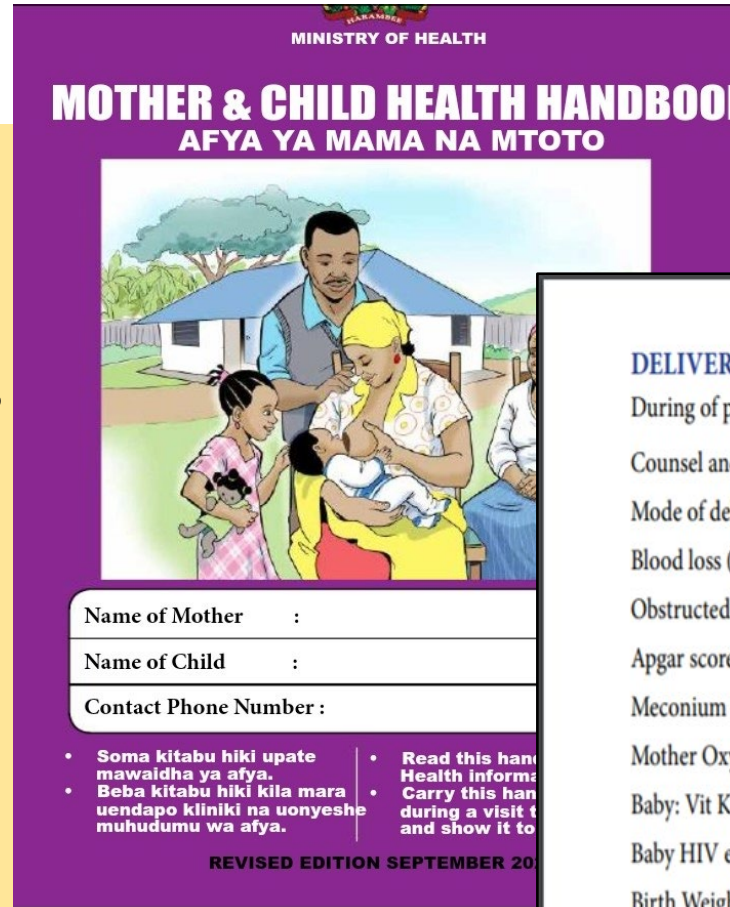


Adolescents –

Chronic care
Disclosure and self awareness
Prevent new infection
Prevent transmission to partner or own child

Approach to Pediatric HIV in Kenya

- Integration of treatment and prevention
- Integration onto maternal newborn child health services
- Comprehensive care
- Task sharing
- Standardized treatment protocols
- M-health – support monitoring and follow-up
- Multi-sectoral engagement



DELIVERY

During of pregnancy ___ weeks, HIV tested Yes No If HIV test not done or Negative at ANC,

Counsel and test; Reactive NR Not tested

Mode of delivery _____ Date _____

Blood loss (Light/Medium/Heavy) _____ Pre-eclampsia _____ Eclampsia _____

Obstructed labour Yes No Condition of mother _____

Apgar score 1min _____ 5min _____ 10min _____ Resuscitation done Yes No

Meconium stained liquor (grade) 0,1,2,3, Drugs administered at delivery:

Mother Oxytocin/Syntocinon HAART

Baby: Vit K TE0 Cord care, apply CHX** OD for at least 10 days or till the cord drops off

Baby HIV exposed: NVP prophylaxis

Birth Weight _____ Birth Length cm _____ Head circumference _____

Place of delivery: Health facility Home , Other (Specify) _____

Conducted by: Nurse Midwife Clinical Officer Doctor , Other (Specify) _____

- Note:
- The baby should be breastfed within 1 hour after delivery
 - Keep the baby warm (Kangaroo mother care skin to skin)
 - Delay bathing the baby for at least 24 hours after birth
 - If preterm or low birth weight less than 2500gms initiate KMC at least 18 hours per day

Cross-cutting risk factor for MTCT of HIV during pregnancy, delivery and breastfeeding

- **Maternal disease status**
 - high plasma viral load [advanced HIV or newly infected]
 - Low CD4 count,
 - rapidly progressive illness)
- **Failure to take ARV's for treatment or prevention**
 - **Undiagnosed**
 - **Systems failures leading to drug stock outs**
 - **Suboptimal retention in care**
- **Lack of viral suppression while on ARV's**
 - Poor adherence
 - Suboptimal ARV protocol
 - Resistant virus

Absolute risk of Transmission			
Period of time	Not-breastfed	Breastfed up to 6 months	Breastfed 18-24 months
During Pregnancy	5-10%		
During delivery	10-20%		
During breastfeeding	0%	5-10%	5-20%
Overall MTCT rate	15-30%	25-35%	30-45%
Mother on cART and virally suppressed	< 1%	< 1%	< 1%

(adapted form de Cock, JAMA,2000)

Survival and HIV-Free Survival Among Children HIV exposed and Unexposed children Aged ≤ 3 Years — Eight Sub-Saharan African Countries, 2015–2017



Prevention of Transmission from an HIV-Infected Woman to Her Infant & reduce infant deaths

Phase 3

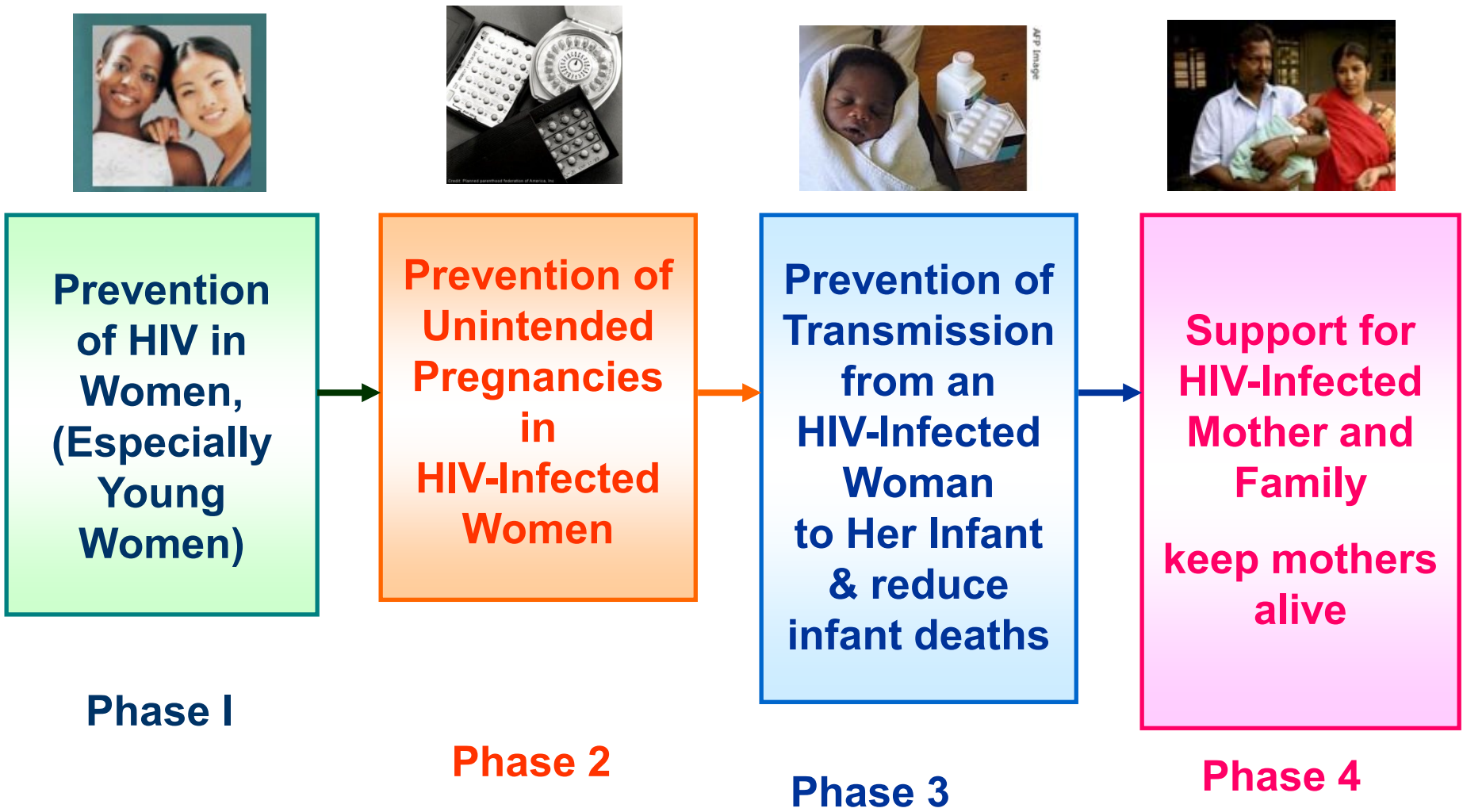
HIV exposure status	Number (%)	Infant HIV free Survival	95% Confidence Interval
Children born to HIV infected women	3,020	94.7	93.5-95.8
Children born to women without HIV	30,703	97.6	97.4-97.8
		Log rank $p < 0.001$	

Jonnalagadda S, Yuengling K, Abrams E, et al. Survival and HIV-Free Survival Among Children Aged ≤ 3 Years — Eight Sub-Saharan African Countries, 2015–2017. *MMWR Morb Mortal Wkly Rep* 2020;69:582–586. DOI: <http://dx.doi.org/10.15585/mmwr.mm6919a3external> icon.

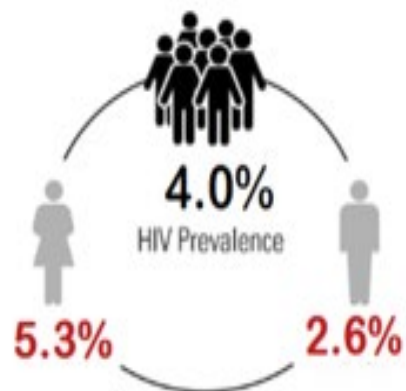
Study site: Eswatini, Lesotho, Malawi, Namibia, Uganda, Zambia, Zimbabwe

Guiding framework for approaching pediatric HIV - Four-Phase Strategy for Prevention of Mother to Child HIV Transmission

Wilcher R et al. Sex Trans Inf 2008;84 (Suppl2):ii54-60



HIV Epidemic in Kenya - We have made progress but not sufficient to end AIDS..



County	Prevalence
Homa Bay	16.2%
Kisumu	15.5%
Siaya	14.1%
Migori	10.4%
Busia	5.4%
Mombasa	5.4%
Kisii	4.7%
Samburu	4.6%
Vihiga	4.6%
Nairobi	4.3%
Uasin Gishu	4.0%

Adolescent and young people

41% adult new HIV infections occur among Adolescents and Young People (15-24 years)



Adolescent (10-19yrs)

PLHIV

99,438

New Infections
5,123



Young adults (15-24yrs)

PLHIV

162,502

New Infections
11,638



82,917

Children living with HIV (0-14)



1,354,350

Adults living with HIV (15+)

New HIV Infections

All ages



34,540

Adults (15+)



29,380

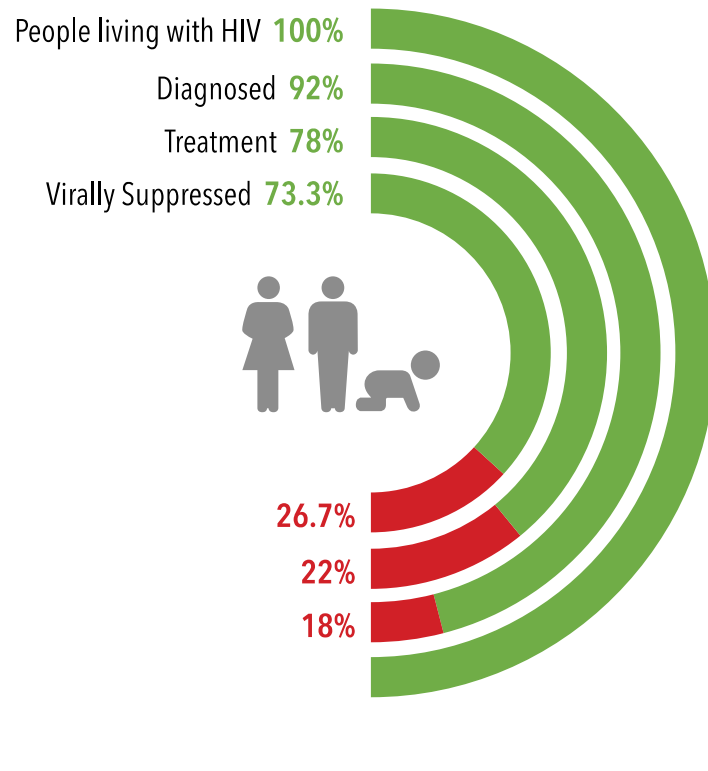
Children (0-14)



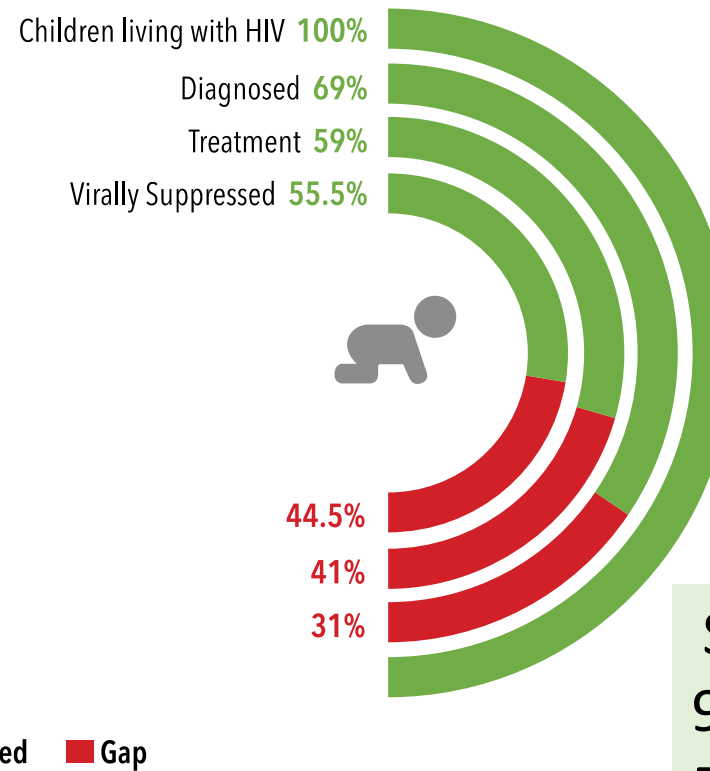
5,160

We are still leaving Children behind in all areas

All ages 95-95-95 Cascade



Children 95-95-95 Cascade



31 % GAP IN DIAGNOSIS

41% GAP IN ART INITIATION

44.5% GAP IN VIRAL SUPPRESSION

Same time period
96% access to BCG and
Penta 1 vaccination for
all children



82,917
children Living
with HIV



14,412

Children living with HIV
not on antiretroviral
treatment



68,505

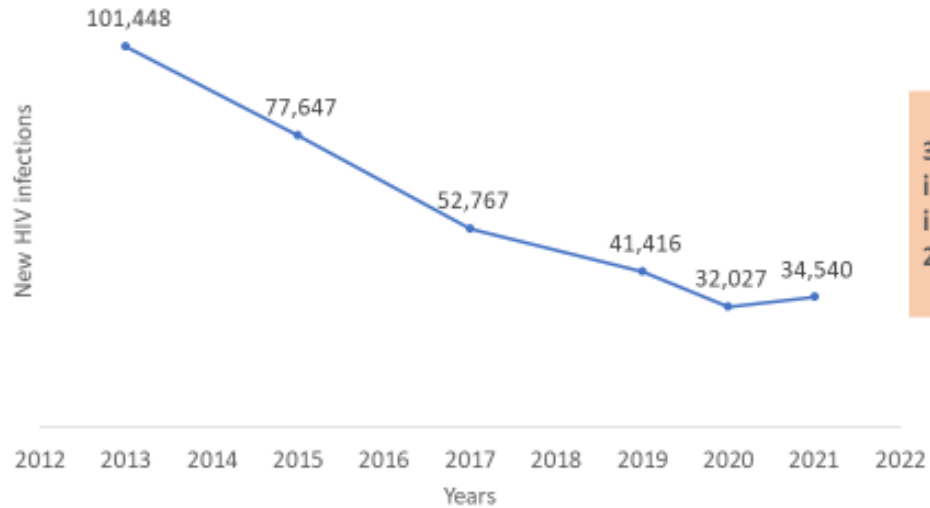
Children living with
HIV on antiretroviral
treatment



▶ *Access to HIV treatment for children remain a challenge. In 2021, about 3,138 children aged 0-14 died from AIDS-related deaths. Majority (60%) of these children are below 5 years*

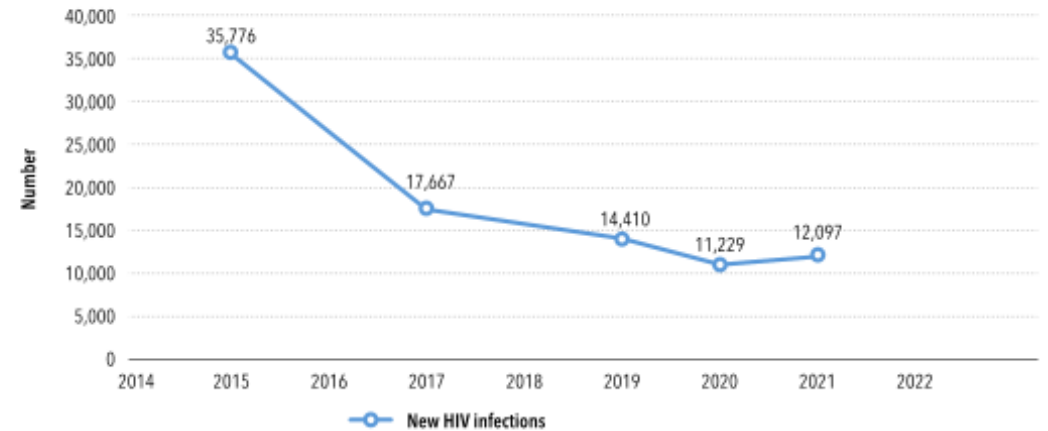
Stagnation in the reduction of new infections

New HIV infections increased in 2021 by 7.3% from 32,027 in 2020 to 34,540 in 2021, the first time in a decade



36 counties had increased new HIV infections between 2020 and 2021

New HIV infections among adolescents and young people aged 15-24 years are declining, but not fast enough



Source: HIV Estimate 2021, National Sordémic Diseases Control Council

Why focus on adolescents

one in every 3 Kenyan citizens is an adolescent or young person aged 15-24 years.

70% of the Kenyan population is aged < 35 years

One in every five children born in Kenya are babies of girls aged < 20 years

	Risk of late breastmilk transmission per 100 child years
HIV +ve at baseline	8.9
Women who sero-converted in postnatal period	
Timing of sero-conversion	
0-9 months	34.56 (26.6-44.91)
10-12 months	9.5 (3.07-29.4)
> 12 months	0
PCR +ve and antibody -ve	75%

Prong 1- Reduce incidence of HIV in women of reproductive age 15-49 years in Kenya



Prevention
of HIV in
Women,
(Especially
Young
Women)

Phase I

	2013	2015	2020
Number of new infections among women of reproductive age	79036	39090	34610

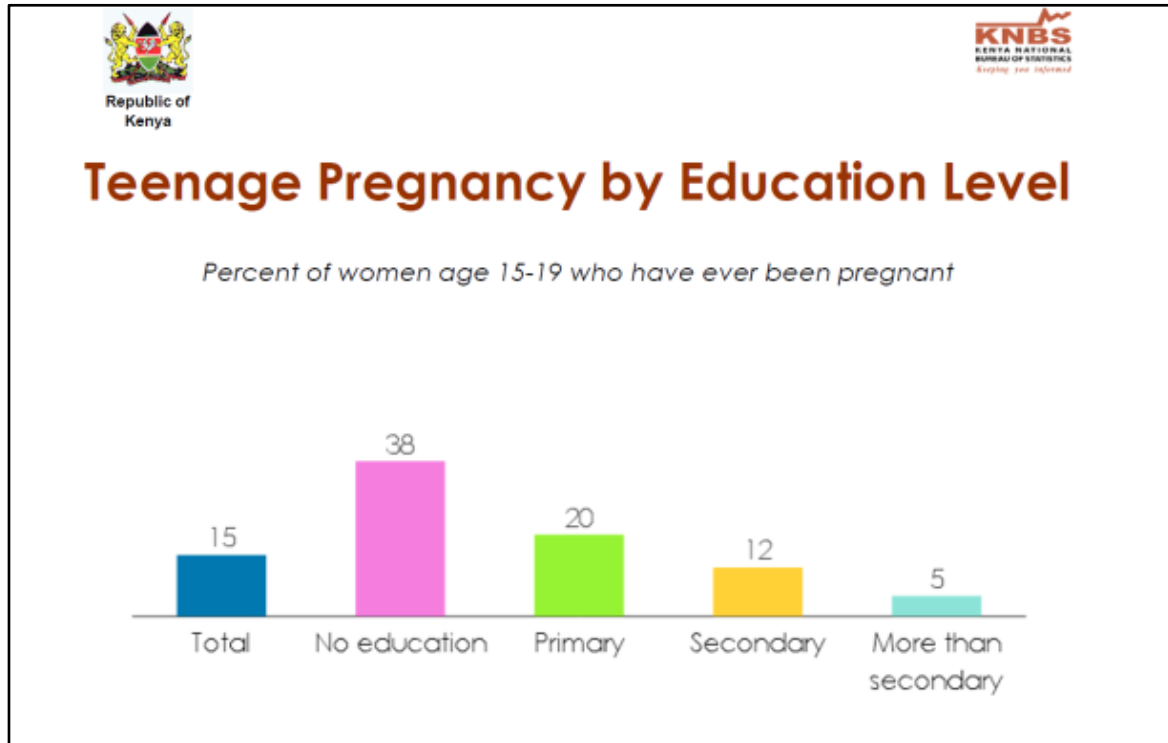
What was the game changer between 2013 and 2015?

1. Reducing availability of the HIV virus through **the test and treat strategy**? [~50% reduction in new infant infections in women of reproductive age] –[
2. **Reducing opportunity for risk by increasing age of sexual debut?** [social protection programs – compulsory free primary, 100% transition to secondary school, cash transfers to reduce sanitary pad poverty]

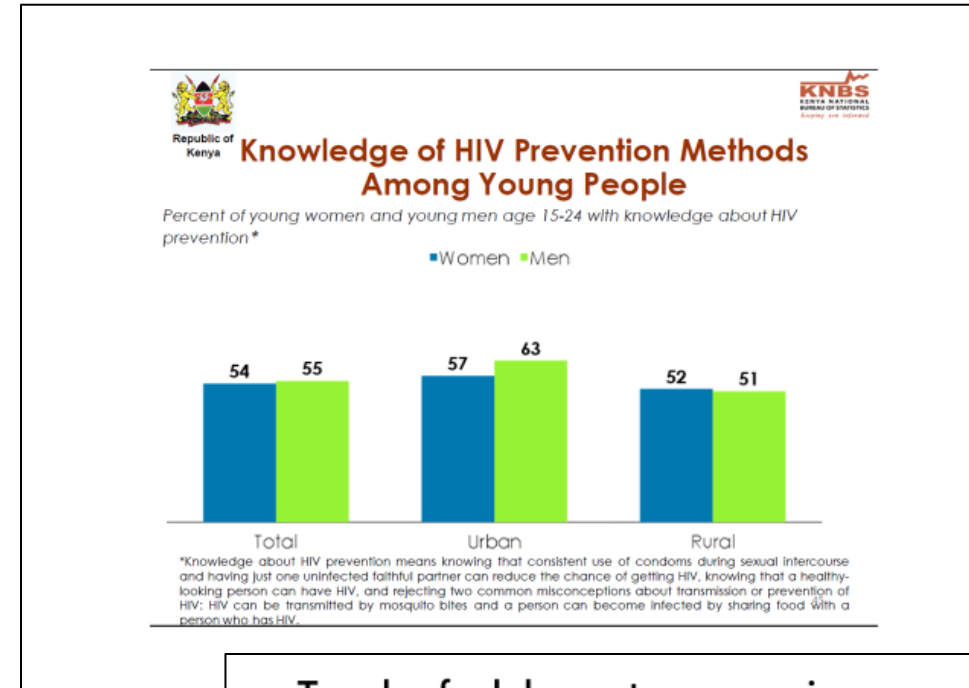
Who is HIV infected, engaging in sex and not virally suppressed?

- partners of HIV negative women accessing MNCH services** [18% of infant infection attributed to women seroconverting during breastfeeding]
- key populations** – is eMTCT integrated into drop in centers serving key populations

Adolescents in Kenya



Only 1 in 2 teens are knowledgeable about preventive methods among young people



Trends of adolescent pregnancies

Year	10-14 years	15-19 years	Total adolescent pregnancies	Antenatal clinic clients	Proportion of adolescents attending antenatal clinic
2016	23,356	252,277	275,633	1,296,168	21%
2017	23,516	316,160	339,676	1,223,317	28%
2018	22,451	404,684	427,135	1,435,246	30%
2019	20,121	376,719	396,840	1,429,951	28%
2020	16,956	314,593	331,549	1,465,589	23%
2021	21,823	294,364	316,187	1,547,656	20%

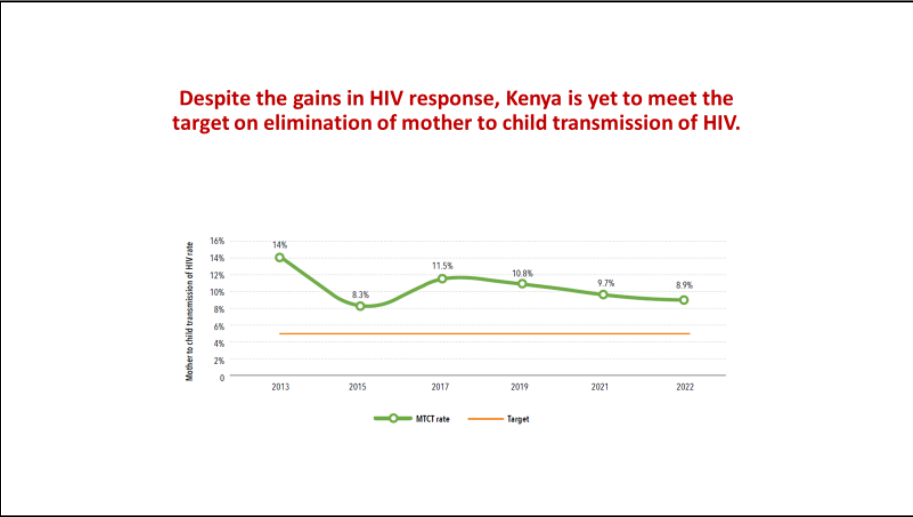
Source: Ministry of Health Kenya Health Information System

In 2021, pregnancies among children aged 10-14 increased by 28.7% from 16,956 to 21,823

Sources of Mother-to-Child Transmission of HIV



Started ART late in pregnancy child infected during breastfeeding	1.76%	Started ART during pregnancy child infected during pregnancy	7.42%
Started ART before pregnancy child infected during breastfeeding	3.37%	Started ART, late pregnancy child, infected during pregnancy	9.13%
Started ART before pregnancy child infected during pregnancy	4.37%	Mothers infected during pregnancy and breastfeeding	14.27%
Started ART during pregnancy child infected during breastfeeding	4.94%	Mother dropped off ART: Child infected during pregnancy or breastfeeding	54.70%



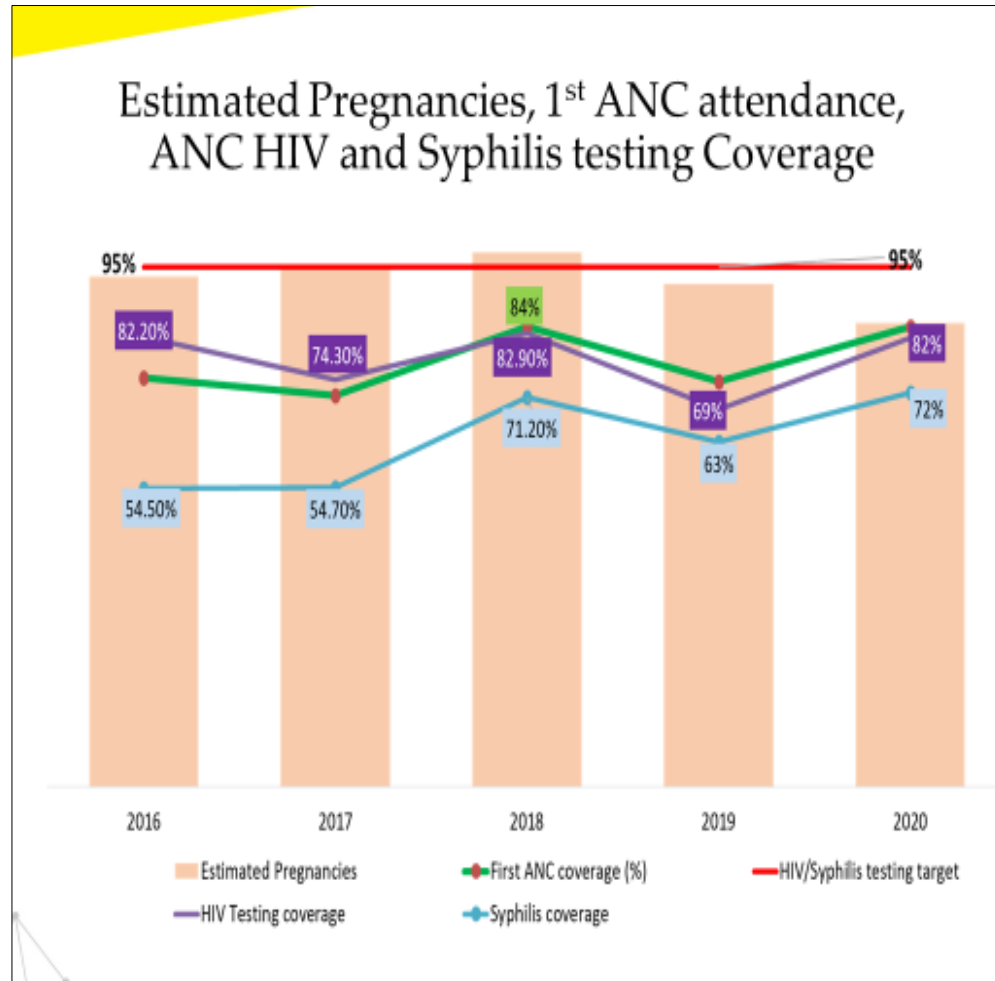
- 50% of infant infections are children of women who dropped off from the services** – half of them during pregnancy and other during breastfeeding.
- 50% of infant infections are during breastfeeding** - 1 in 2 (24%) - infants of women who were lost to the health services, 1 in 5 (18%) - infants of newly infected women & 1 in 10 (10%) started ART in pregnancy

What are the challenges?...we are not reaching everyone who needs the service



Prevention of Transmission from an HIV-Infected Woman to Her Infant & reduce infant deaths

Phase 3



Women are staying away,walking away and others are not able to reach the services

- 18% of pregnant women are not accessing antenatal care [~2 out of 10 women] [community level advocacy for ANC]
- 2 out of 10 women who access antenatal care are not tested. [process within facility, actors, commodities]
- Only 6 out of 10 pregnant women are getting to the point of knowing their HIV status. [100% achievement of the 95% target will take us to reaching 85% in need of service – should we aim for higher targets]
- 4% of known positive women also walk away from our services [quality of our services interpersonal communication]
- ANC is a core -

There is an urgency for early infant HIV diagnosis

Delayed diagnosis lead to premature death

- 52% of perinatally HIV infected die by the age of 2
- Higher mortality attributed to delays in diagnosis and lack of access to primary HIV care.
- Early diagnosis and early initiation of ART reduces progression of disease and mortality by 75% and 76 % respectively

Excellent acceptance of routinely offered HIV testing among children admitted into the hospital.

- Ayieko et al (2006) found a test acceptance of 95% in children admitted into Kenyatta national Hospital ¹
- Kethat et al. (2021) found test acceptance of 92% in Lubango Pediatric hospital in Angola

This strategy identifies children had advanced disease – majority WHO stage 3

Current policy is to routinely offer HIV testing to all children admitted into pediatric wards

¹J Oyieko, R Nduati, D Njai Acceptability of routinely offered HIV testing in the pediatric wards of Kenyatta National Hospital. (Year 2006)

² Ketha Francisco Rashmi Kumar, Lucy Mungai, Dalton Wamalwa and Ruth Nduati Determinants of Caretakers Acceptability of HIV Testing among Children Admitted at Lubango Provincial Pediatric Hospital, Angola. Int Arch Public Health Community Med 2021, 5:054 DOI: 10.23937/2643-4512/1710054

Exploring missed opportunities for pediatric diagnosis in out-patient clinical services

Objectives – A cross section survey to

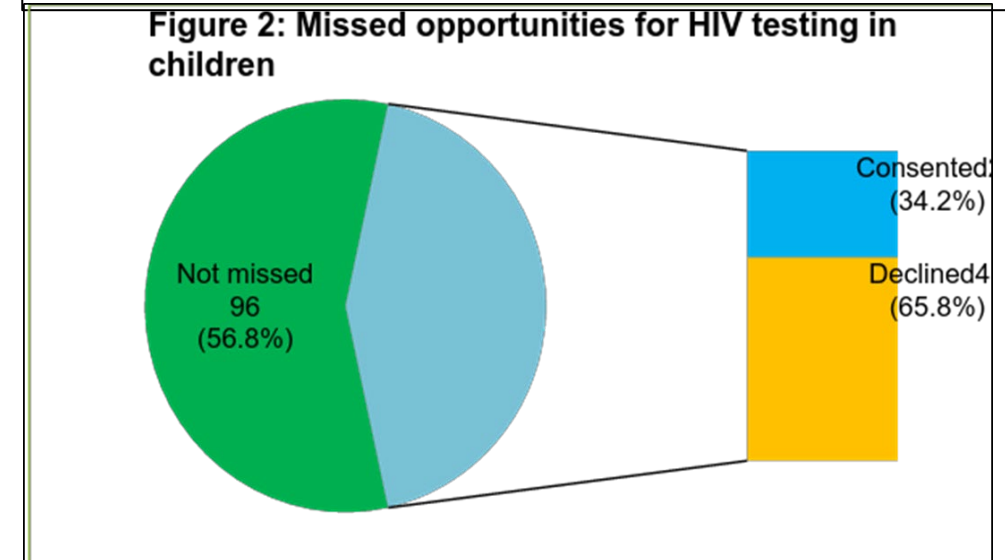
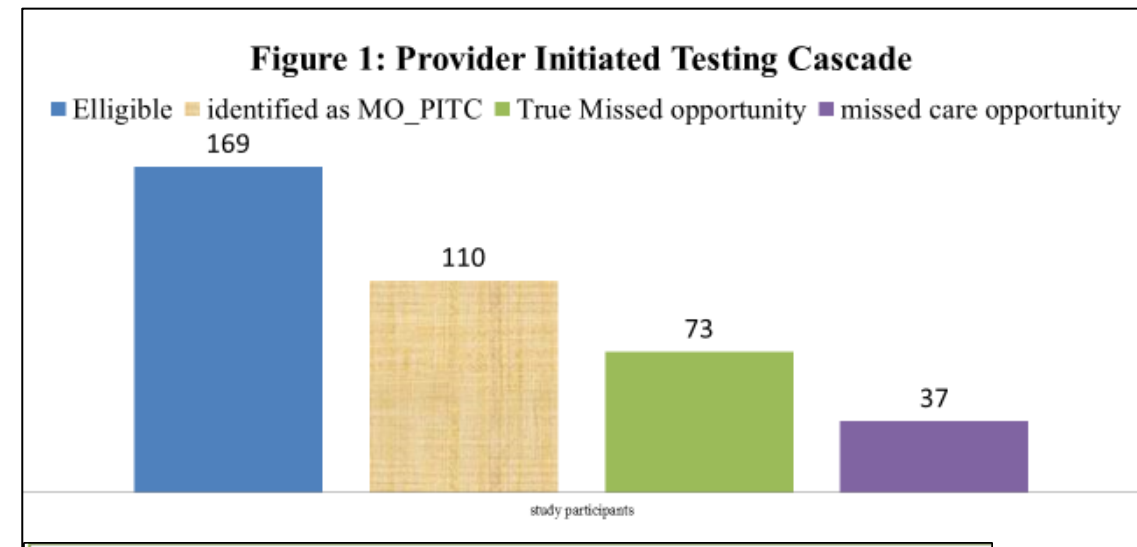
(i) determine the prevalence of missed opportunities for HIV testing among children aged 0-14 years accessing health care services at Mbagathi County Hospital

(ii) identify factors associated with missed opportunities and

(iii) determine acceptability of PITC among those with a missed opportunity.

Results - 73(43.2%) of 169 interviewed were found to have a missed opportunity.

- 31.3 % of the missed opportunities for testing were in the MCH and 54% in Outpatient clinics.
- The median age of missed opportunities was 9 months.
- 34% of those found to have missed opportunity on offer of test gave consent for testing –
- 65.8% declined citing fear of stigma and the perception that the child was too young for testing.



A follow up study found acceptance of routinely offered pediatric HIV testing among 333 children in the same facility to be 8.41%.^{1,2} Reasons for declining testing Lack of perceived risk (67.88%) and needing for time to think (21.9%)

Low detectable viral load is associated with MTCT of HIV: Results Landes et al 2019

- 1274 women in the study [1191 (93.5%) knew their HIV status, & 1154 (96.9%) on ART
- Suboptimal adherence associated with unsuppressed VL
- Low detectable virus more in
 - Adolescent mothers
 - < 6 months on ARV
 - Lower education level

	Un-detectable < 40 copies/ml N=902	Low detectable 40-1000 copies/ml N=86	Un-supressed > 1000 copies/ml N=136
Viral suppression	902 (78.1%)	86 (7.4%)	136 (11.8%)
N infections	8	6	19
Transmission Rate (95% CI)	0.9% (0.3,1.5)	7.0% (1.5,12.5)	14.0% (8.1,26.6)
aOR (95% CI)	1.0	8.5 (2.9,25.20)	17.4 (7.4,41.4)

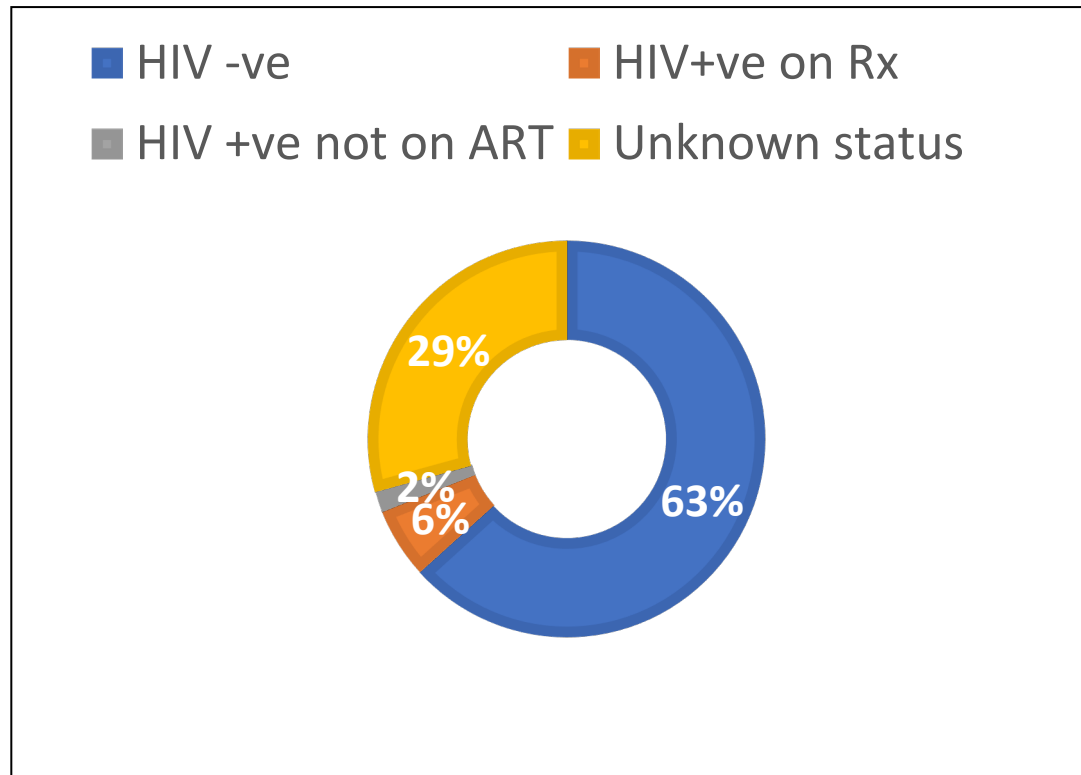
Presentation of this data at national meeting – accelerated decisions to optimize treatment and to switch to **TLD** [tenofovir, lamivudine and Dolutegravir]

Standard Treatment Protocol – Optimizing care

Source – NASCOP dashboard	2017 - Pre DTG switch		2020 - Post DTG switch		2020	
	Total HIV population				Estimated HIV+ve Pregnant women	
Total eligible	1,100,000		1354000		66935	
Validly tested (monitoring)	1063000		1292000		66225	
<400 copies/ml	652277	61%	1156000	89%	62036	94%
400-1000 copies per ml	220663	21%	37834	3%	778	1%
≥1000 copies/ml	188220	18%	96753	7%	3411	5%

Retention in routine care setting

Status of the identified HIV exposed children at Kiambu County Hospital



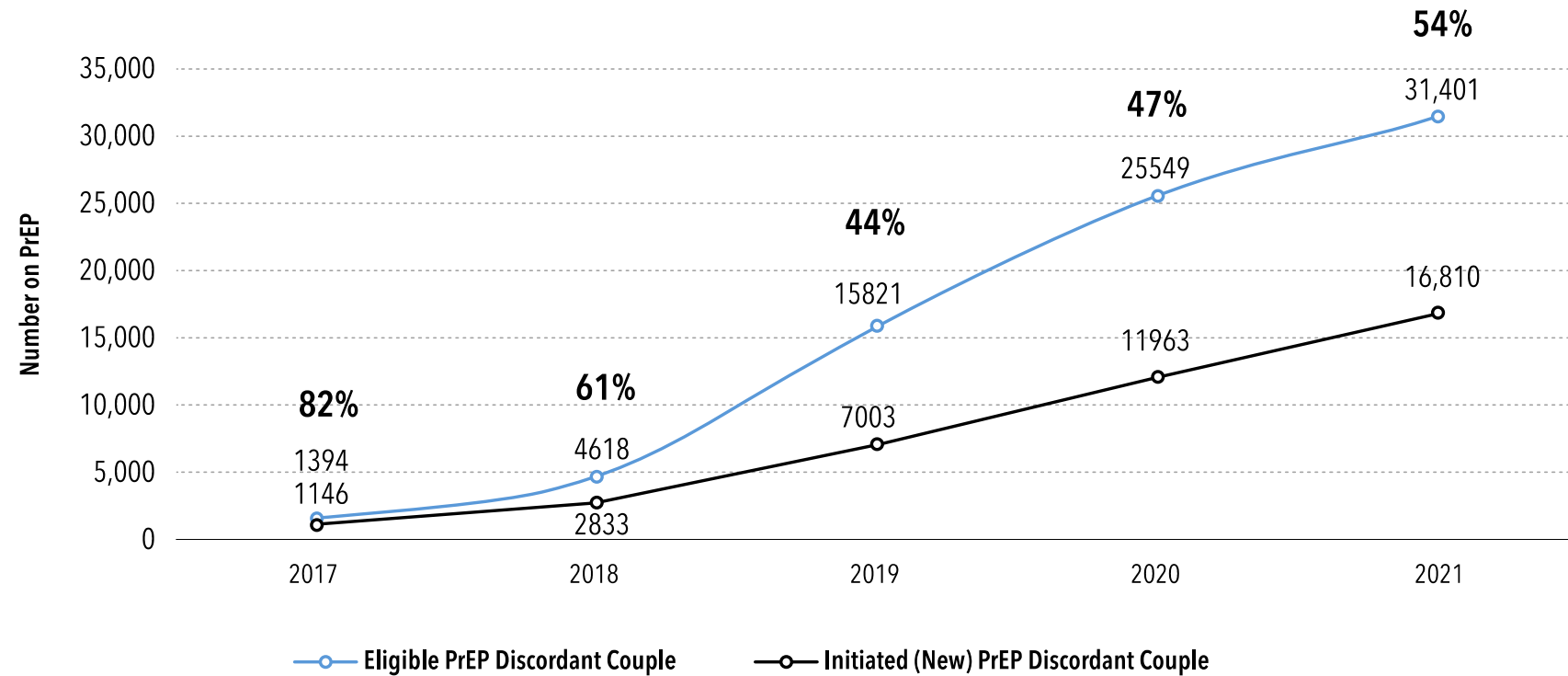
Betty Mburu 2021 MMed Dissertation – U of Nairobi

Male Partner Participation

	Adjusted odd ratio for increased uptake	95% CI
Skilled delivery	2.0	1.51,2.64
Exclusive breastfeeding	1.7	1.0, 2.91
BCG immunization	3.59	1.0,12.88
ARV use	6.16	1.26,30.41

Odeny et al. BMC Pregnancy and Child Health 2019

Uptake of pre-exposure prophylaxis among discordant couples



Source: Kenya Health Information System

Association between caregiver depression and ART adherence among HIV infected children

A Kihui 2019 MMed dissertation U of Nairobi

Characteristics	Adherence <95% N=22	Adherence ≥95% N=94	COR (95% CI)	P value	AOR	P value
Depression status						
PHQ <10	9(40.9%)	83 (88.3%)	1 (Reference)		1 (Ref)	
PHQ ≥10 (depressed)	13(59.1%)	11(11.7%)	0.09 (0.03,0.26)	0.000	0.08(0.02,0.29)	0.000

- ✓ a PHQ ≥10 among caregivers was associated with 92% lower likelihood of achieving good adherence AOR 0.08(CI 0.02-0.29) (p=0.00).
- ✓ severity of caregiver depression was significantly associated with increased likelihood of poor adherence to ART among children.

Association between caregiver depression and degree of child's viral suppression

A Kihiu 2019 MMed dissertation U of Nairobi

Characteristic	Viral load < 1000 N=74	Viral load ≥ 1000 N=42	COR	P value	AOR	P value
Depression status						
PHQ <10	72(97.3%)	20(47.6%)	1 (Reference)		1 (Reference)	
PHQ ≥10	2 (2.7%)	22(52.4%)	39.6(8.6-182.7)	0.000	31.2 (6.5,150.9)	0.000

- ✓ PHQ ≥10 among caregivers was associated with 31 times higher likelihood of having a child who was not virally suppressed. AOR 31.2(CI 6.5- 150.9) p=0.000.
- ✓ Severity of depression among caregivers was associated with an increased likelihood of poor viral suppression among HIV infected

Conclusion

- We have made progress
- We still have far to go to ensure consistent safe treatment for children and adolescents.
- Thank you

Acknowledgement

- Kenya National AID Control Council for national data slides.

Nursing Continuing Professional Development

To be awarded contact hours for this webinar, complete the evaluation found at:

<https://www.classmarker.com/online-test/start/?quiz=ye66435af4902700>

You also will receive an email with this link within two days after the webinar

Additional Questions?

Email Sheila at Sheila@anacnet.org

The Association of Nurses in AIDS Care (ANAC) is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation.





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