Baby on Board: Pediatric & PMTCT Interventions to Improve HIV Outcomes for Infants, Children, and Adolescents

Moderator: Meena Srivastava, Medical Officer, Office of HIV/AIDS
Overview

❖ Introductions & PEPFAR AP3 and UNAIDS Global Alliance Priorities
❖ Abstract presentations
❖ Moderated discussion
Global Progress in PMTCT and Pediatric HIV

Progress made in PMTCT and Pediatric HIV programs has stagnated globally, and more effort is needed to close the gaps for mothers, infants, children, and adolescents.

Source: UNAIDS 2021, 2022
Global Progress towards reaching CLHIV with ART

20 countries account for over 650,000 CLHIV not receiving treatment

Reimagined PEPFAR centers Health Equity for Priority Populations

**Strategic Pillars**

1. **Health Equity for Priority Populations**
   - "Know & close your gaps"
   - Reducing the prevention and treatment gaps for (a) adolescent girls and young women, (b) children and (c) key populations

2. **Sustainability**
   - "Sustaining the response"
   - Strengthening national and local political, programmatic, financial and community leadership

3. **Health Systems and Security**
   - "Leveraging our assets"
   - Utilizing the PEPFAR platform for broader disease surveillance and public health programming

4. **Partnerships**
   - "Impactful partnerships"
   - Designing new partnerships with key private, public and multi sector entities that can complement existing programs and expand reach

5. **Science**
   - "Follow the science"
   - Investing in the scale-up of cutting edge behavioral, & implementation science to bend the curve on new infections

**Enablers**

- Innovation
- Leading with Data
- Community Leadership

Source: PEPFAR Annual Meeting, 2022
PEPFAR Accelerating Progress in PMTCT and Pediatric HIV (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.

UNAIDS Global Alliance to End AIDS In Children: Objectives

1. Early testing and optimized treatment for infants, children, and adolescents living with HIV
2. Closing the treatment gap for pregnant/breastfeeding women living with HIV and improving continuity of treatment
3. Preventing new HIV infections among pregnant/breastfeeding adolescents and women.
4. Addressing rights, gender equality and the social and structural barriers to access services and promote participation
Summary of Key PMTCT Activities

Prevent and identify incident infections
- Maternal retesting at recommended time points; ensure HTS counselor is assigned to MCH
- HIV self-testing for maternal retesting
- Improve M&E for maternal retesting
- PrEP for PBFW
- Link HIV-negative pregnant AGYW to DREAMS
- Male partner testing
- Integrate GBV services into ANC/PMTCT

Ensure uptake of ART among PBFW
- Ensure all ANC facilities are testing for HIV and reporting data accurately
- In countries with low facility attendance, look for case finding opportunities in private facilities and community birth attendance settings
- Engage faith-based institutions and other community structures for demand creation
- Intensify transition to TLD for PBFW

Continuity in treatment for PBFW
- AGYW-friendly PMTCT services and DSD/MMD, e.g. group ANC models and new mother programs for AGYW, weekend appointments
- Peer-based support, e.g. mentor mothers and peer support groups
- Align OVC support to facilities with high rates of AGYW pregnancies
- QI for VL coverage and suppression in PBFW; improving disaggregated VL data for PBFW

Care and testing for HIV-exposed infants
- Improve infant testing uptake and reduce missed tests at all recommended time points, including through community support
- Provide POC EID as part of an optimized lab network
- Track infants until final outcome; e.g. longitudinal cohort monitoring, inclusion in EMRs, continuity coordinators at sites
- OVC support to at-risk HEI and their families
Summary of Key Activities for Children and Adolescents

1st 95
- Promote family-based index testing
- Utilize community testers
- Establish efficient HTS streams and sick entry points
- Use validated HIV screen-in tool (OPD)
- Allow HIV self-testing for CALHIV
- EID and HTS (within community PMTCT)
- Integration of OVC, KP and TB for HIV case finding
- Testing through other modalities
- M&E and CQI

2nd 95
- Prevention of IIT/CoT
- AHD diagnosis and treatment
- DSD scale up & MMD for all eligible C/ALHIV
- Service integration (OVC, KP & TB)/TPT
- ART optimization
- Improve linkage to ART
- Consultation rooms for peds (one-stop-shop family approach)
- pDTG roll-out
- Improve ICT implementation for C/ALHIV
- Strengthen patient tracking system

3rd 95
- POC testing for VL
- Family centered approach
- Case management to strengthen ART adherence
- Caregiver education
- One team approach (OVC platform to improve VL)
- Community demand creation strategy
- Secure commodity supply chain
PMTCT and Pediatric/Adolescent Treatment Overview

Meena Srivastava
Meena to drop in a few intro slides from this deck that we are using for the technical session (slides 15-23).

https://docs.google.com/presentation/d/1yOaCn6WecKOicaM_e1y-6PWBjRVXG9DDtOnlVdCOH0w/edit#slide=id.g12bba0c3e00_0_166

Meena Srivastava, 11/8/2022
Improving EID Uptake at 6 weeks and Preventing New infections among HEI at Final Outcome through Effective Mother-Baby Pair Tracking: Experience from the USAID Funded ARFH-ICHSSA 2 Project in Lagos State

Presenter: Jimin Sontyo, Association for Reproductive & Family Health (ARFH)
Authors: Jimin Sontyo¹ Iwuala Felix¹, Doreen Magaji², Oke Olufemi¹, Biola Asekun, Mobereade Ayotunde¹, Olabisi Mapaderun³, Amina Mbaya³
Affiliations: ARFH, USAID Nigeria, FHI360
Hi Ola, Lana and Amy - FYI that Nigeria will be submitting slides later today for this LP abstract session. Feel free to review and let us know if any feedback if you have time. I'll update you all when slides are in. Thanks!

Meena Srivastava, 11/8/2022

Hi all - Nigeria slides were submitted starting on slide 4. Thanks!

Meena Srivastava, 11/8/2022
Background

- Nigeria continues to experience challenges with Prevention of Mother to Child Transmission of HIV (PMTCT) and tracking of HIV Exposed Infants (HEI), due to increased cycles of interruptions in treatment.
- The USAID funded Integrated Child Health and Social Services Award (ICHSSA-2), implemented by Association for Reproductive and Family Health (ARFH) and Partners, adopted an effective mentor mother tracking model, to increase EID uptake at 6 weeks and prevention of new MTCT of HIV after the receipt of EID results.
Methods

To prevent missed opportunities and ensure mother-baby pairs are tracked until final outcomes, ICHSSA-2 adopted a two-prong approach of tracking mother-baby pairs through mentor mothers, engaged Case Managers.

Using a tracking register,
• Facility based: case managers
• Community based: mentor mothers on the project track the infants until results are received and expected outcomes are achieved.

The mentor mothers track the mother-baby pairs to ensure the uptake of EID at 6 weeks and to ensure that they receive a rapid test at 18 months, including comprehensive services.

Quarterly review meetings were held for learning and sharing of best practices on Adherence, retention and care for HEI/CLHIV.
Results

Out of the 949 (477M, 472 F) being tracked, a total of 765 (378M, 387F) HEI were due at least 6 weeks for EID, sampling rate of 99.6% was achieved {762 (376M, 386F} following tracking supports.

Result returned rate was 90% {754 (371M, 383F)} with 8 cases found (5M, 3F). Positivity yield= 1.1%

Of the 119 (53M, 66F) who had HIV rapid test done at final outcome, 111 had negative and 8(3M, 5F) had positive results respectively.

Positivity yield= 6.7%
Replicating this model/intervention in other countries

Opportunities
- Increased pediatric case finding
- Preventing missed opportunities
- Increased identification and linkage of pregnant women

Challenges
- Perception of competition among TBAs
- Client follow up related issues
- Delayed DBS results
Slide 14

1  Could this be clarified? Competition could be a good thing, but here its listed as a negative  
   Jacqueline Firth, 11/8/2022

4  Hi Jimin - Could you clarify this bullet on competition between TBAs? Perhaps on the slide or in your talking points, you can expand further...  
   @sontyo.j@arfh-ng.org  
   Meena Srivastava, 11/8/2022
Conclusion

Effective tracking of mother baby pairs in a community-based approach, with support from the mentor mothers engaged as Case Managers could improve the uptake of EID at 6weeks (99.6%).

Also, this approach has the potential to prevent vertical transmission from mother to child at the 6 weeks timeline based on ongoing support through regular home visits and provision of care and support services for the mother-baby pair by community based Case Managers.

The sustained technical assistance provided by USAID/Nigeria and informed guidance provided during routine weekly meetings have continued to strengthen program implementation for optimal outcome of interventions. This is a golden practice that should be replicated.
Thank you
Child, Adolescent and Family Care Days provide a mix of interventions that support retention and virological suppression in children living with HIV

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**Presenter:** Jackie Dunlop, Anova Health Institute

**Authors:**

**Affiliations:**
Thanks, Meena. I welcome Sarah’s input on if it’s appropriate to ask how OVC IPs can be included in this important work.
Rachel Golin, 11/8/2022

Hi all, OVC partners are noted as participants on Slide 10 which is good. Note that our OVC IP (HIVSA) has an MOU with Anova that lays out collaboration/roles/responsibilities.

It could be useful for Anova to highlight how they work with OVC on this activity (and more broadly), especially the role of the Child and Youth Care Workers (CYCWs) in ensuring holistic care for C/ALHIV, family disclosure support, etc.
Sarah Dastur, 11/8/2022

Yes, thank you, Sarah > yes, I was thinking of more granularity as the mention on slide 10 is broad.
Rachel Golin, 11/8/2022

Agree with you both. I’ll ping Jackie Dunlop from ANOVA to see if she can incorporate this feedback.
Meena Srivastava, 11/8/2022

Thanks for the comments. This was indeed a gap in the presentation. I have added a new slide fourteen
Jackie Dunlop, 11/9/2022

Hi all - FYI that these are slides submitted by the Anova team for the LP PMTCT/peds abstract session. In case you have any feedback, let me know.
Thanks!
Meena Srivastava, 11/10/2022

Thank you Jackie!
Meena Srivastava, 11/10/2022
Background

- A family-centred model of care for HIV services
- Care Day’s support this by grouping children and adolescents
- Part of the National Department if Health’s Paediatric and Adolescent Matrix of Interventions

<table>
<thead>
<tr>
<th>Core components of a Care Day</th>
<th>Retention and adherence support coordinated</th>
<th>Outcomes in Children and adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days chosen in advance and bookings made</td>
<td>Comprehensive psychosocial support provided focusing on adherence and disclosure</td>
<td>Does the model improve retention in care at the facility?</td>
</tr>
<tr>
<td>Pre-retrieval of files the day before with pre-packing of medication</td>
<td>Community organisations and roving district/subdistrict mentoring teams can be present at the facility</td>
<td>Does the model improve virological monitoring? Virological suppression?</td>
</tr>
<tr>
<td>Psychosocial support provided – usually in groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentorship of clinicians and counsellors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVCY community partners present</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Children, adolescents and caregivers spend less time at the facility.
Linking HIV-affected families to OVCY Community-based partners through Care Days

- OVCY community-based partners are key to providing children, adolescents and families living with HIV with comprehensive psychosocial support

- Coordination through Care Days allows for:
  - Community and Facility Teams to collaborate and build relationships
  - Community Team to meet and engage families while they await care
  - Consent to be signed for support and home visits
  - Healthcare workers to refer for specific support where need is identified during clinical consultation (e.g. disclosure)
  - Case conferencing of difficult cases by facility and community team members
Methods

- Care Days were formed at priority facilities

- At the time of analysis, Care Days had taken place for more than 6 months in:
  - 46 facilities in Johannesburg; and
  - 31 facilities in Mopani
  - Facilities with care days less than 6 months old and tertiary hospitals were excluded

- We measured retention, viral load (VL) done and virological suppression (<1000 copies) for clients under 15 years old

- Compared facilities with Care Days to those without in the same district

- National Department of Health Reports (Original source TIER.Net for April to June 2022)

- Retention was measured by the number and percentage of children who left care in the quarter, because they had disengaged, transferred out or died.
Results: Johannesburg (Q3 2022)

Facilities with Care Days 46

- Number in facilities with Care Day 2,909 (47.2%)
  - Viral load done 1,987 (67.0%)
  - Viral load suppressed 1,719 (86.5%)

Number lost to care 179 (6.2%)

Facilities without Care Days 69

- Number in facilities without Care Days 1,396 (22.7%)
  - Viral load done 887 (65.9%)
  - Viral load suppressed 743 (83.8%)

Total children on ART 6,163

Excluded: 1,535 (24.9%) at 9 facilities
Facilities with Care days for under 6 months or tertiary hospitals

Significant (p=0.0157)

Number lost to care 112 (8.0%)

Non-significant (p=0.1007)

Significant (p=0.0126)
Results: Mopani (Q3 2022)

Total children on ART: 3,043

Facilities with Care Days: 31
- Number in facilities with Care Days: 1,420 (46.7%)
  - Viral load done: 1,176 (81.6%)
  - Viral load suppressed: 83 (71.7%)
- Number lost to care: 63 (4.4%)
  - Significantly better (p=0.0000)

Facilities without Care Days: 81
- Number in facilities without Care Days: 1,309 (43.0%)
  - Viral load done: 1,031 (74.8%)
  - Viral load suppressed: 706 (68.5%)
- Number lost to care: 58 (4.4%)
  - Significantly better (p=0.0000)

Excluded: 314 (10.3%) at 9 facilities
Facilities with Care days for under 6 months

Retention the same
Conclusion

• The number of children not retained in facilities without Care Days is disproportionately higher when compared with facilities with Care Days in Johannesburg but not in Mopani.
  • Smaller numbers in Mopani make this indicator less reliable

• Both VL done and suppressed were better in Care Day facilities in Johannesburg and Mopani, suggesting the core components of Care Days strengthen quality of care provided to children.
Replicating this model/intervention in other countries

• Care days are part of the South African National Department of Health’s (DoH) Paediatric HIV Matrix of Interventions
• This is a standardised list of interventions to help SA achieve the UNAIDS 95-95-95 targets for children with HIV
• The Matrix allows for DoH and Implementing Partners to work toward implementing common activities and shares accountability
• Ensuring strategies are aligned allows for an integrated approach to implementation
• In-country strategies focussing specifically on the child HIV programme are necessary to direct efforts towards this underserved group
Thank you:
• To our Funders who made this work possible
• To the Clinic and Community Staff who work tirelessly
• To the Children and Families who worked with us to make Care Days a success
Outcomes of Children Living with HIV Transitioned to Dolutegravir based Antiretroviral Therapy Regimen in Midlands and Manicaland Provinces, 2022

Authors: Sibanda T. P1, Ganje N1, Tachiwenika E1, Hlungwani E1, Taperi T1, Nyamundaya T1, Muzondo M1, Chingombe B1, Muchekeza M2, Mukuzunga M2, Mushavi A2, Nyafesa T2, Hlupeni A2, Andifasi P2, Nyagara T3, Mhangara M3, Mukungunugwa S1, Dhodho M1

Affiliations:
1Zimbabwe Health Interventions
2Ministry of Health and Childcare
3United States Agency for International Development - Zimbabwe
ACCE is a Five-year USAID funded PEPFAR HIV Prevention, Care & Treatment Project

October 1, 2021, to September 30, 2026

220,052

13%, 28,607
0-24 years

87% of TX_CURR
191,444
25+ years

372 Sites Supported by ZHI

13%  
48 High Volume Sites (> 1,000 ART clients)

23%  
86 Medium Volume Sites (500-999 ART clients)

64%  
238 Low Volume Sites (<500 ART Clients)

Geographical Scope:
Midlands and Manicaland Provinces

ACCE Consortium
ZHI
Zyandiri AFRICAID
FHI 360
Dolutegravir (DTG) is a highly potent antiretroviral medicine and significantly reduces viral load (VL) among people living with HIV (PLHIV).

In 2021, Zimbabwe introduced the child-friendly dispersible pediatric DTG (pDTG) 10mg tablet in addition to 50mg tablet:
- Phased approach
- Full scale up with effect from July 2022

ZHI is supporting roll out and transition to DTG based regimens:
- Capacity building of health care workers
- Supporting the quantification, ordering and distribution of the drugs to site level

Routine program data showed suboptimal viral load suppression among children:
- Poor adherence
- Pill burden / unfriendly regimens
Objectives

Broad Objective
• To assess outcomes of children transitioned to Dolutegravir (DTG)-based ART regimen in Midlands and Manicaland Provinces of Zimbabwe, 2022

Specific Objectives
• To assess DTG transition rates among eligible children

• To assess viral load suppression rates in children before and after transition to DTG-based ART regimen
Methods

• Analytic cross-sectional study focusing on client outcomes before and after DTG transition across 34 high-volume sites
  ○ The facilities were purposively selected ➔ ZHI supported staff at those facilities
  ○ All children on ART in these facilities were included
  ○ All children 14 years and below at time of ART start were included
• The primary outcomes were viral load suppression and transition to a DTG based regimen
• Ethical approval obtained ➔ Non-research determination
• Client folders were reviewed, and routinely collected data were abstracted and captured into a Kobo electronic data collection tool
• Data were analyzed using Stata 15
• 1,003 children included
• Median age 11 years (IQR 7-13)
• At ART start 811 (81%) were on a non-DTG based regimen
  • NNRTI-based regimens – 56%
  • LPV/r based regimens – 25%
• 811 children on non-DTG based regimen

• 635 (78%) were switched to a DTG based regimen between October 2021 to June 2022
  • Before full scale up
Results for both groups was available for 276 children

+16% change in suppression
• Subgroup analysis
  • 56 children had unsuppressed viral load before transition and of these 86% (48) were suppressed after transitioning to DTG
  • 220 had suppressed VL before transition and 98%(216) remained with a suppressed VL after transition
• Children who remained on a non-DTG containing regimen were **8 times more likely to have unsuppressed VL** compared than those who switched to DTG (RR 7.86, 95% CI 2.4-25.2)
Discussion

• A significant proportion of children were transitioned to a DTG containing regimen
• Those on a DTG regimen had better VL suppression compared to those on a non-DTG regimen
• Following these observations;
  • 93% of CAYPLHIV in the ZHI supported sites are on DTG – based regimens as at September 30, 2022
  • VL suppression rates among CAYPLHIV on DTG – based regimens have increased to 93% as at September 30, 2022 compared to VL suppression rates of 87% as at March 31, 2022 for the same cohort
• Recommend programs to develop guidance to expedite transition of children to DTG-based regimens.
Thank You!

- This report was made possible by the support of the U.S. Government and American people through the United States Agency for International Development (USAID) and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR)
- MOHCC staff at all levels
- ZHI program staff
- Program beneficiaries

The contents of this report are the responsibility of Zimbabwe Health Interventions and do not necessarily reflect the views of USAID or the United States Government.
Moderated Discussion and Q&A
Thank you!