Updates on Status of the HIV/AIDS Epidemic among Children and Adolescents in Africa Region.

Landry Tsague, MD. MPH., Senior HIV/AIDS Specialist.
UNICEF Regional Office, West and Central Africa
“Children should be the first to benefit from our successes in defeating HIV, and the last to suffer from our failures.”

Anthony Lake
Executive Director, UNICEF
Globally, new HIV infections among children and adolescents decreased by 63% since year 2000; Yet, Sub-Saharan Africa (SSA) accounts for the majority of these new infections \( (n=330,000) \).

Estimated number of new HIV infections among children aged 0–9 and adolescents aged 10–19, Global and UNICEF sub-Saharan African Region, 2001–2014

Eastern and Southern Africa Region (ESAR) recorded the largest drop of new HIV infections among children (0-9) compared to WCAR, 2000-2014.


These PMTCT gains are linked to the rapid increase in access to efficacious ARV drugs (from 2008).

Percentage of pregnant women living with HIV receiving most effective antiretroviral medicines for PMTCT, by UNICEF Regions, 2005-2014

Most high burden countries adopted most efficacious ARV regimens (Option B+) 2011-2015

Countries and PMTCT Regimen (22 Global Plan Countries)
Still, far too many pregnant women living with HIV are not receiving efficacious ARV drugs for PMTCT.

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Namibia</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>South Africa</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>Uganda</td>
<td>92%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>91%</td>
</tr>
<tr>
<td>Botswana</td>
<td>91%</td>
</tr>
<tr>
<td>United Republic of Tanzania</td>
<td>90%</td>
</tr>
<tr>
<td>Zambia</td>
<td>86%</td>
</tr>
<tr>
<td>Ghana</td>
<td>81%</td>
</tr>
<tr>
<td>Cote d'Ivoire</td>
<td>80%</td>
</tr>
<tr>
<td>Burundi</td>
<td>80%</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>78%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>78%</td>
</tr>
<tr>
<td>Lesotho</td>
<td>73%</td>
</tr>
<tr>
<td>Kenya</td>
<td>72%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>67%</td>
</tr>
<tr>
<td>Malawi</td>
<td>66%</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>47%</td>
</tr>
<tr>
<td>Angola</td>
<td>45%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>29%</td>
</tr>
<tr>
<td>Chad</td>
<td>25%</td>
</tr>
</tbody>
</table>

Note: excludes single dose nevirapine
Nigeria shares the largest burden of New HIV infections among Children (0-14) globally.

And most HIV infections from mother to child shifted from the perinatal to the postnatal (breastfeeding) period

Implications for long term survival without ART

Estimated number (%) of new vertical HIV infections among children (aged 0-14) by period of MTCT (perinatal period vs. breastfeeding/postnatal period), sub-Saharan Africa, 2000 vs. 2014

2000

- Perinatal HIV infections (within 6 weeks of birth): 250,000 (51%)
- Postnatal HIV infections (beyond 6 weeks after birth): 480,000

2014

- Perinatal HIV infections (within 6 weeks of birth): 74,000 (39%)
- Postnatal HIV infections (beyond 6 weeks after birth): 120,000 (61%)

UNICEF
Post-natal HIV infection and Child Survival

Survival by age 20 without ART among children acquiring HIV during BF increases with time of infection.

Source: Stover et al., Updates to the Spectrum/Estimation and Projection Package (EPP) model to estimate HIV trends for adults and children, STI. 2012

Overall, vertical HIV infections account for 72% of all HIV cases among adolescents (10-19)

AIDS-related deaths are declining rapidly for all age groups . . . except adolescents

Estimated number of AIDS-related deaths by 5-years age groups, 2001–2014

Note: Age group 0-5 dropped due to scale. Trend among 0-5 decreasing too.
Children (0-14) are not benefitting from ART as much as adults

Percentage of adults (aged 15+) and children (aged 0-14) living with HIV receiving antiretroviral therapy (ART) in all low- and middle-income countries, 2000-2014

- Paediatric ART
- Adult ART

1.8 million of children (<15 years) are in need of ART (2014)

Achieving the 90-90-90 for children by 2020

→ Requires more efforts in achieving the first 90!!

Unlocking the first “90”: A Gateway to improve survival among children and adolescents
..Disparity remains in coverage for early infant HIV diagnosis (EID) services for children aged < 2 years.

Looking at the right place (Case-finding).

→ *In high HIV prevalence and effective PMTCT program settings (Malawi-Option B+)*

**Shifting trend of pediatric HIV prevalence to non-PMTCT settings in a context of effective PMTCT programme (Option B+ national roll-out, Malawi).**

---

Source: Malawi Ministry of Health 2014

One caveat: Total number of children attending each platform would indicate coverage of testing and yield.
Looking at the right places (Case-finding)

→ **In low HIV prevalence settings**

- Highest HIV+ children yield from pediatric outpatients, Family Centered Testing, and PMTCT (Togo 2013-2014, n=20 clinics)

---

**Which Testing platform generates highest volume of HIV+ children?**

Togo, 2013-2014 (n= 1,828 HIV+ children)

- Peds Outpatient: 52%
- EID/PMTCT: 15%
- Family-centered approach MCH: 20%
- Immunization: 6%
- Pediatric inpatients: 7%
- TB clinic: 0%

---

12/6/2015

*Data source: Togo PNLS (2013 – 2014)*
Case-finding strategies to unlocking the first “90” for children.

→ “Silver keys” and “The Golden key”

10% Outpatient/Immunization clinics testing (high-prevalence settings)
14% Inpatient/hospitalized adolescents (high-prevalence settings, e.g. Zimbabwe)
22% Inpatient/TB case (high TB burden countries, e.g. South Africa)
29% Inpatient/Severely Malnourished (All SSA countries)
33% Children of parents in ART program (High HIV burden countries, e.g. Malawi)

Sources: Fergusson et al, 2007; Hesseling et al. 2009; Ferrand et al. 2010; Cohen et al. 2010
Uptake of various Case-finding strategies

- Lowest for family centered HTC approaches

### Uptake and yield of HIV testing and counselling among children and adolescents in sub-Saharan Africa: a systematic review

Darshini Govindasamy, Rashida A Ferrand, Stephanie MS Wilmore, Nathan Ford, Saeed Ahmed, Hoviyeh Afnan-Holmes, and Katharina Kranzer

**Acceptance rate (%)**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Range</th>
<th>Pooled estimate (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PITC, inpatient (n = 4)</td>
<td>59.4 to 95.3</td>
<td>86.3 (65.5 to 100)</td>
</tr>
<tr>
<td>PITC, outpatient (n = 3)</td>
<td>40.7 to 96.5</td>
<td>69.5 (41.1 to 97.9)</td>
</tr>
<tr>
<td>Family centred HTC (n = 5)</td>
<td>9.8 to 100</td>
<td>51.7 (10.4 to 92.9)</td>
</tr>
<tr>
<td>Home-based HTC (n = 5)</td>
<td>56.5 to 99.4</td>
<td>84.9 (74.4 to 95.4)</td>
</tr>
<tr>
<td>Outreach (n = 5)</td>
<td>9.9 to 90.2</td>
<td>60.4 (23.4 to 97.4)</td>
</tr>
</tbody>
</table>
Vision: ZERO New Infections; ZERO Deaths; ZERO Discrimination

ALL IN Strategic Framework Goals – the FAST TRACK to End AIDS among Adolescents (ages 10-19) by 2030

Priority Population (10-14) and (15-19)

Programmes*

Targets to 2020

Adolescent leadership, mobilization and engagement; Human rights and Equity; Sexual and Reproductive Health and Education; Improved Data to drive planning and results

Adolescents Living with HIV

- Adolescents who acquire HIV during adolescence
- Adolescents with vertically-acquired HIV (diagnosed and undiagnosed).

At Risk Adolescent Population Groups

- Adolescent girls (particularly in Sub-Saharan Africa)
- Adolescent key population groups i.e. adolescents who inject drugs; gay, bisexual and transgender adolescents; and adolescents who sell sex

Social and programmatic enablers

HIV Testing, treatment and Care

Combination HIV Prevention

*PACKAGE appropriate mix of proven programmes for each defined adolescent population group based on epidemiological context

90 – 90 – 90 = reduce AIDS-related deaths among adolescents living with HIV by 65%

Reduce new HIV infections among adolescents at risk of infection by 75%

Zero stigma and discrimination (by 2030 -2020 impact target in development)
Ways Forward

→ Fast-tracking HIV Care and Treatment for children and adolescents living with HIV

- **Identifying all HIV+ children and adolescents (0-19)**
  - Implement Case-finding approach for chronic HIV survivors.
  - Intensify facility-based PITC
  - Decentralize and simplify HIV testing (e.g. PoC technologies).

- **Linkages to ART services and monitoring of Viral Load**
  - Decentralize ART and Viral load monitoring
  - Implement Task shifting and Quality of care improvement.

- **Adherence and Retention for children and adolescents**
  - Strengthen family and community engagement
  - Promote adolescents targeted interventions

- **Leveraging Innovations** (including e/mhealth)
Ways Forward

→ *End game for elimination of MTCT*

• **Integration of lifelong ART within routine MNCH package**
  → Fast-tracking integration in WCAR and consolidating gains in ESAR.

• **Retention of mother-infant pairs during post-partum**
  → Strengthening community facility linkages.
Leveraging and Building on Key Partnerships to end AIDS in children by 2030
Acknowledgements

UNICEF WCAR
• Clauses Kamenga
• Abdelkader Bacha
• Elevanie Nyankesha
• Amandine Bollinger
• Dorothy Mbori Ngacha
• Komi Abola.

UNICEF ESAR
• Anurita Bains
• Laurie Gulaid

UNICEF HQ
• Tyler Porth
• Lauren Arnesen
• Sostena Romano
• Priscilla Idele
• Ravikiran Bhairavabhotla
• Dick Chamla
• Susan Kassede
• Tajudeen Oyewale
• Cheweb Luo

Thank You
Merci