Current State of AIDS Epidemic in Nigeria: Role of ARVs on PMTCT

Atiene Solomon SAGAY  MD, FWACS, FRCOG (Lond)
Professor of Obstetrics and Gynaecology
Chairman, PMTCT National Task Team
OUTLINE

• Introduction
• Adoption of Global e-MTCT Plan
• What Nigeria planned to do / Projections
• Achievements by end 2012
• What is the way forward?
HIV positive persons: 3.1 million
Annual Births: ~6 million
HIV prevalence (ANC): 4.1% (2010)
HIV+ pregnant women (annual): ~229,480

- 58% of pregnant women attend ANC at least once
- 45% attend at least 4 times
- 35% of births occur in health facilities
- 39% deliveries by Skilled Birth Attendants
- HIV+ Babies (annual): 50,000 – 80,000
Introduction 2

- Nigeria has the 2nd highest burden of HIV globally
- About 3.4m PLHIV (spectrum 2012)
- 270,000 new infections occurred in 2012
  - Adults 210,000
    - 58% Women
    - 42% Men
  - Children 60,000 (Highest annual new cases globally)
- Rate of MTCT in Nigeria - 30% (modeling 2012)
- 70% of HIV infection concentrated in 12 + 1 out of 36 states of the country
- Nigeria accounts for about 30% global MTCT
The Nigerian PMTCT program started in 6 Tertiary Hospitals in 2002
Number of facilities offering PMTCT services nationally

![Bar chart showing the number of facilities offering PMTCT services from 2007 to 2012. The number of facilities increased from 419 in 2007 to 1,320 in 2012.](chart.png)
Score Board after nearly One Decade of Implementation

<table>
<thead>
<tr>
<th></th>
<th>Nigeria</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV+ pregnant women:</td>
<td>210,000</td>
<td>210,000</td>
</tr>
<tr>
<td>Coverage of ARV/ART for PMTCT:</td>
<td>22%</td>
<td>88%</td>
</tr>
<tr>
<td>Estimated HIV incidence (modelled):</td>
<td>0.39%</td>
<td>1.68%</td>
</tr>
<tr>
<td>Contraceptive prevalence:</td>
<td>20%</td>
<td>62%</td>
</tr>
<tr>
<td>Unmet need for FP:</td>
<td>20%</td>
<td>14%</td>
</tr>
<tr>
<td>ANC at least 1 visit:</td>
<td>58%</td>
<td>92%</td>
</tr>
<tr>
<td>Median duration of BF:</td>
<td>19 m</td>
<td>16 m</td>
</tr>
<tr>
<td>MTCT rate in 2009:</td>
<td>32%</td>
<td>19%</td>
</tr>
<tr>
<td>New child infections 2009:</td>
<td>64,700</td>
<td>40,500</td>
</tr>
</tbody>
</table>

Sources: WHO Universal access report 2010, Nigeria DHS 2008, South Africa DHS 2003, UNAIDS analysis
Paediatric HIV Epidemic in Nigeria

• Flourishing on innocent little lives
• Entirely preventable
• We know what to do
• We know how to do it
• Stakeholders are willing and supportive
• .......Hope is not lost but where are the actors?
Nigeria endorses global plan for e-MTCT
Launch of the Global Plan 2011

Two Global Targets:
- Reduce new HIV infections among children by 90%
- Reduce number of AIDS related Maternal deaths by 50%

A 4-Point Plan:
- Frame it
- Advocate for it
- Do it
- Account for it
Goal: "To eliminate new paediatric HIV infections and improve maternal, newborn and child survival and health in the context of HIV."

**Overall Targets**

1. Reduce new paediatric HIV infections by 90%
2. Reduce mother-to-child transmission rate (MTCT) to <5%

**Prong Targets and Indicators**

**Prong 1:** 50% reduction in HIV incidence (+3 indicators)

**Prong 2:** Unmet FP to ZERO (+1 indicator)

**Prong 3:** Vertical transmission < 5% (<2% around 6 weeks) (+9 indicators)

**Prong 4:** 90% reduction in HIV-related maternal and infant and child deaths (+4 indicators)
Towards Elimination of MTCT in Nigeria

• **Renewed Commitment for Elimination of MTCT**
  – Commitment to fully implement New Scale up (e-MTCT) Plan (2011-2015)

• **Equity-focused strategic analysis** of current program performance to identify and overcome bottlenecks (routine program data, effectiveness study, etc..)

• **Strengthened emphasis on Prongs 1&2** through better collaboration and integration of SRH, MNCH and HIV programs.
  – Programming for E-MTCT will not occur in isolation and calls us to get out of our comfort (Prong 3&4) zone

• **Sustained funding for cost-effective interventions** to support elimination of MTCT and contribute to maternal health and child survival.

• **National leadership, States and LGA buy-in**, accountability and ownership (communities).
What did Nigeria plan to do?
Nigeria: 2011-2015 e-MTCT Targets

• Reduce HIV incidence among women of reproductive age by 50% between 2011 and 2015

• Reduce unmet need for family planning by 100% between 2011 and 2015

• Reach 90% of HIV-positive women and infants with ART or ARV prophylaxis according to National PMTCT guidelines
Number of new child HIV infections due to mother to child transmission, by scenario, Nigeria

2010 – base scenario: 2009 programme coverage maintained through 2015
50_100_90 – intervention scenario: 50% reduction in HIV incidence, eliminate unmet need for family planning, provide ARVs or ART to 90% of women in need

FMOH / UNAIDS
Number of new HIV infections among reproductive age women, by scenario, Nigeria

2010 – base scenario: 2009 programme coverage maintained through 2015
50_100_90 – intervention scenario: 50% reduction in HIV incidence, eliminate unmet need for family planning, provide ARVs or ART to 90% of women in need.

FMOH / UNAIDS

25/11/2013
Number of women living with HIV giving birth (women in need of PMTCT services), by scenario, Nigeria

- **2010** – base scenario: 2009 programme coverage maintained through 2015
- **50_100** – intervention scenario: 50% reduction in HIV incidence, eliminate unmet need for family planning.

FMOH / UNAIDS

25/11/2013 BHPF 2013 Abuja
Percent of women receiving ARV or ART by regimen, by scenario, Nigeria

In this scenario the 2015 regimen and coverage will result in 8% transmission rate
Estimated mother to child transmission rate (including transmission during pregnancy, delivery and breastfeeding), by scenario, Nigeria

**MTCT transmission rate, Nigeria**

- **2010 – base scenario:** 2009 programme coverage maintained through 2015
- **50_100_90 – intervention scenario:** 50% reduction in HIV incidence, eliminate unmet need for family planning, provide ARVs or ART to 90% of women in need.

---

FMOH / UNAIDS
25/11/2013

BHPF 2013 Abuja
Achievements by end 2012
ART Coverage in Pregnancy By Country

Percentage of eligible pregnant women living with HIV receiving antiretroviral therapy for their own health, 2012

2015 target: 90% coverage

Significantly reducing HIV transmission rates requires rapidly scaling up the coverage of antiretroviral medicines

Coverage

- 2009: 13%
- 2010: 10%
- 2011: 20%
- 2012: 17%

HIV transmission rate from mother to child, including breastfeeding

- 2009: 31%
- 2010: 32%
- 2011: 30%
- 2012: 30%

The number of women acquiring HIV infection has not changed substantially

Women acquiring HIV infection (15-49 years old), 2009-2012

- 2009: 120,000
- 2010: 120,000
- 2011: 120,000
- 2012: 110,000

- 60,000: The number of new HIV infections among children in 2012.
- 8%: Decrease in the number of new HIV infections among children, 2009-2012.
- 8 out of 10: Pregnant women living with HIV did not receive antiretroviral medicines to prevent mother-to-child transmission of HIV.
- Nearly 9 out of 10 eligible children are not receiving HIV treatment.

High coverage of antiretroviral medicines has resulted in low HIV transmission rates from mother to child.

Coverage
- 61%
- 91%
- 89%
- 87%

HIV transmission rates from mother to child, including breastfeeding:
- 2009: 14%
- 2010: 7%
- 2011: 6%
- 2012: 5%

28% fewer women newly infected with HIV means that fewer children will be exposed to HIV.

Women acquiring HIV infection (15–49 years old), 2009–2012:
- 2009: 210,000
- 2010: 210,000
- 2011: 200,000
- 2012: 150,000

- **14,000**: The number of new HIV infections among children in 2012.
- **63%**: Decrease in the number of new HIV infections among children, 2009–2012.
- **1 out of 10**: Pregnant women living with HIV did not receive antiretroviral medicines to prevent mother-to-child transmission of HIV.
- **1 out of 10**: Women or their infants did not receive antiretroviral medicines during breastfeeding to prevent mother-to-child transmission.

The number of new HIV infections among children continues to decline rapidly.
New HIV infections among children (under 15 years old).

The number of eligible children who are receiving HIV treatment has increased rapidly, to nearly 7 out of 10.
E-MTCT in Nigeria: The Worry

- Progress in Nigeria is critical to eliminating new HIV infections among children globally.
- Nearly all indicators assessed show stagnation and suggest that Nigeria is facing significant hurdles.
- Meeting the 2015 targets requires massive effort.
What is the way forward?
E-MTCT in Nigeria: On-going Efforts

• Government has taken a bold step to focus on the 12+1 states with the highest burden of HIV, which account for about 70% of new HIV infections.

• In addition, it is rapidly scaling up service delivery to stop new HIV infections among children.

• Govt. has embarked on an intensive state-focused data-driven decentralization initiative.
National Focus

- Saturation of PMTCT services in the 12+1 states with highest HIV/AIDS burden
- Improved Ownership and Coordination at State level
- Intensive state-focused data-driven decentralization initiative.
- Increased involvement of the Organised Private Sector and Private Health facilities
- Strengthening MCH services and RH/HIV integration
- All PMTCT sites to provide EID services
All pregnant and breastfeeding women infected with HIV should initiate triple ARVs (ART), which should be maintained at least for the duration of mother-to-child transmission risk. Women meeting treatment eligibility criteria should continue lifelong ART.

(Strong recommendation, moderate-quality evidence)

For programmatic and operational reasons, particularly in generalized epidemics, all pregnant and breastfeeding women infected with HIV should initiate ART as lifelong treatment.

(Conditional recommendation, low-quality evidence)

In some countries, for women who are not eligible for ART for their own health, consideration can be given to stopping the ARV regimen after the period of mother-to-child transmission risk has ceased.

(Conditional recommendation, low-quality evidence)
### Rationale: Shift from Option A to B+ or B

**BENEFITS FOR MOTHER AND CHILD**

| Ensures all ART eligible women initiate treatment |
| Prevents MTCT in future pregnancies |
| Potential health benefits of early ART for non-eligible women |
| Reduces potential risks from treatment interruption |
| Improves adherence with once daily, single pill regimen |
| Reduces sexual transmission of HIV |

**BENEFITS FOR PROGRAM DELIVERY & PUBLIC HEALTH**

| Reduction in number of steps along PMTCT cascade |
| Same regimen for all adults (including pregnant women) |
| Simplification of services for all adults |
| Simplification of messaging |
| Protects against transmission in discordant couples |
| Cost effective |

Major issue now is not “when to start” or “what to start” but “whether to stop”
# Summary of Changes in WHO Recommendations: What to Start in Adults

<table>
<thead>
<tr>
<th>Target Population</th>
<th>2010 ART Guidelines</th>
<th>2013 ART Guidelines</th>
<th>Strength &amp; Quality of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV+ ARV-NAIVE Adults</td>
<td>AZT or TDF + 3TC (or FTC) + EFV or NVP</td>
<td>AZT or TDF + 3TC (or FTC) + EFV or NVP</td>
<td>Strong, moderate-quality evidence</td>
</tr>
<tr>
<td>HIV+ ARV-NAIVE Pregnant Women</td>
<td>AZT + 3TC + NVP or EFV</td>
<td>TDF + 3TC (or FTC) + EFV (as fixed-dose combination)</td>
<td>Strong, moderate-quality evidence</td>
</tr>
<tr>
<td>HIV/TB Co-Infection</td>
<td>AZT or TDF + 3TC (or FTC) + EFV</td>
<td>TDF + 3TC (or FTC) + EFV</td>
<td>Strong, moderate-quality evidence</td>
</tr>
<tr>
<td>HIV/HBV Co-Infection</td>
<td>TDF + 3TC (or FTC) + EFV</td>
<td>TDF + 3TC (or FTC) + EFV</td>
<td>Strong, moderate-quality evidence</td>
</tr>
</tbody>
</table>
**Key research questions: Pregnant Women**

**ARV toxicity surveillance:**
- Safety of early, lifelong ART for pregnant and breastfeeding women?
- Maternal toxicity, pregnancy toxicity (stillbirth, low birth weight, prematurity, birth defects) and infant toxicity?

**Mother-to-child transmission and mother and child health impact:**
- Impact on overall HIV-free survival and and overall MTCT rate (*at the end of breastfeeding* as well as at 6-weeks)?
- Impact on maternal morbidity and mortality, sexual transmission, and the long-term success of first-line ART?

**Adherence and retention:**
- Acceptability of ART to women, especially those who initiate lifelong ART before they meet «adult eligibility» criteria»
- Adherence and retention rates for women with both low and high CD4?
- Health systems and community interventions needed to achieve high levels of adherence and retention in setting of universal ART?
STEPS TO HIV-FREE GENERATION IN NIGERIA

HIV-free Generation

- TasP
- Option B+
- EID
- Paed ART

Male Involvement
Family Planning (LAPMs)

Combination Prevention

Task-Shifting
Decentralization: HIV/MCH/RH
Private Sector Engagement

Community engagement for participation and action
Conclusion

• Eliminating mother-to-child transmission of HIV requires a solid foundation in community partnership

• Although antiretroviral drugs (ARVS) alone cannot achieve this goal, without ARVs there will be very little movement

• The key is to address all strategies concurrently
Acknowledgements

• NASCP FMOH
• PMTCT National Task Team
• Dr. Nathan Shaffer and Members of all the WHO 2013 Consolidated GDGs
• FHI 360 for inviting me to make this presentation
THANK YOU FOR LISTENING