Global Update on HIV Treatment 2013: Results, Impact and Opportunities

WHO/UNAIDS/UNICEF v2
Outline

Results: Progress towards Global Targets
- Antiretroviral treatment
- Prevention of mother-to-child transmission
- Treatment for children and key populations
- Treatment of co-infections

Making an Impact: The strategic use of ARVs
- Averting HIV-related deaths
- Reducing new HIV infection

Looking ahead
- Changes in eligibility under 2013 ARV guidelines
- Enhancing impact

Conclusions
Methodology

Global AIDS Response Progress Reporting (GARPR)

- Annual reporting of programme data by countries (MoH, NAPs), electronic platform managed by UNAIDS, validated jointly by WHO, UNICEF, UNAIDS
- Set of standardized indicators for tracking UN Political Declaration and Universal Access Health Sector reporting
- By May 2013, 124 out of 144 low- and middle-income countries provided ART data, representing 99% of the estimated total number of people on ART at end of 2012

Estimating epidemic size and treatment need

- Country based estimates using Spectrum model (UNAIDS/WHO)
- In May 2013, completed and validated 2012 data for Global Plan countries (n=22)
- Other country-specific and global 2012 estimates available in September 2013
01 | Results: 9.7 million people on ART by end of 2012 — 1.6 million more than at the end of 2011

Actual and projected numbers of people receiving antiretroviral therapy in low- and middle-income countries, and by WHO Region, 2003–2015

01 | Results: People receiving treatment in low- and middle-income countries and % of eligible people receiving antiretroviral therapy

TOTAL: 9.7 MILLION
61%

results: Antiretroviral therapy retention rates at 12, 24 and 60 months in selected low- and middle-income countries, 2012
01 | Results: Countries are at different stages of scale-up

Gap closed

- SOUTH AFRICA

Gap closing

- ETHIOPIA

Gap constant or widening

- NIGERIA

- CAMBODIA

- INDIA

- UZBEKISTAN

01 | Results: % of pregnant women living with HIV and their infants receiving antiretroviral medicines, 2007–2011

Source: Towards the elimination of mother-to-child transmission of HIV and keeping their mothers alive: abbreviated progress report 2012.
01 | Results: PMTCT coverage in Global Plan countries increases from 59% to 65% (2011–2012)

- **Number of pregnant women living with HIV receiving ARVs (excluding single-dose nevirapine) for PMTCT**
- **Number of pregnant women living with HIV needing ARVs for PMTCT**
- **Coverage**

Note: Numbers from 2009 include single-dose nevirapine. Numbers from 2010-2012 exclude single-dose nevirapine.

Results: PMTCT coverage in African Global Plan countries varies between 13% and 95%

Coverage of antiretroviral medicines for preventing mother-to-child transmission in 20 of the 22 priority countries in the Global Plan, 2012

- South Africa: 87%
- Nigeria: 20%
- United Republic of Tanzania: 77%
- Mozambique: 86%
- Kenya: 53%
- Zambia: 95%
- Zimbabwe: 81%
- Malawi: 51%
- Ethiopia: 41%
- Democratic Republic of the Congo: 13%

Source: Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS) and 2013 UNAIDS estimates.
01 | Results: HIV testing and counselling coverage among pregnant women, 2005 and 2009–2012

Source: 2013 Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS), United Nations Department of Economic and Social Affairs,
01 | Results: 630,000 children on ART in low- and middle-income countries end of 2012

Absolute number of children < 15 years on ART at end of 2012
01 | Results: 2012 increase in children on ART by 10% — too low to close the coverage gap

Source: Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS) and 2013 UNAIDS estimates.
Results: The gap between adult and child ART coverage in 20 high burden countries is widening.

Source: Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS) and 2013 UNAIDS estimates.
01 | Results: Access to ART for people who inject drugs remains insufficient, the example of Eastern Europe

People who inject drugs as a proportion of all people living with HIV with a known transmission route and the proportion of people who inject drugs who received antiretroviral therapy in reporting countries, WHO European Region (2011)

<table>
<thead>
<tr>
<th>PWID among all PLWHAs</th>
<th>PWID among all on ART</th>
</tr>
</thead>
<tbody>
<tr>
<td>59%</td>
<td>21%</td>
</tr>
</tbody>
</table>

*Preliminary 2011 ART data and 2010 HIV surveillance (case reporting) data.

Sources: European Centre for Disease Prevention and Control and WHO Regional Office for Europe (21,22); HIV/AIDS surveillance in Europe. End-year report 2006 (23); HIV/AIDS in Europe: moving from death sentence to chronic disease management (24); Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS).
01 | Results: Increased uptake of HIV testing among newly diagnosed TB patients

Source: Global TB Reporting (WHO) – preliminary analysis based on data from 43 countries
Outline

Results: Progress towards Global Targets
- Antiretroviral treatment
- Prevention of mother-to-child transmission
- Treatment for children and key populations
- Treatment of co-infections

Making an Impact: The strategic use of ARVs
- Averting HIV-related deaths
- Reducing new HIV infection

Looking ahead
- Changes in eligibility under 2013 ARV guidelines
- Enhancing impact
02 | Impact: ART averted 4.2 million deaths

Annual number of people dying from AIDS-related causes in low- and middle-income countries globally compared with a scenario of no antiretroviral therapy, 1996–2012

The data points for 2012 are projected based on the scaling up of programmes in 2009–2011 and do not represent official estimates of the number of annual AIDS-related deaths.
02 | Impact: Decreasing mortality in Brazil

Mortality rates in Brazil for AIDS-related, non-AIDS-related and unknown causes of death, 1986–2009

Source: Grinsztejn et al. (7). Changing mortality profile among HIV-Infected patients in Rio de Janeiro, Brazil: Shifting from AIDS to non-AIDS related conditions in the HAART era. PLoS One, 2013, 8:e59768
Impact: Life expectancy increase in rural South Africa

Average adult life expectancy, rural South Africa, 2000–2011

Impact: PMTCT averted more than 800,000 child infections

Number of children acquiring HIV infection in low- and middle-income countries, 1996–2012

The data points for 2012 are projected based on the scaling up of programmes in 2009–2011 and do not represent official estimates of the number of annual child infections.
02 | Impact: Drop in child infections in Botswana

PMTCT coverage and number of new child infections in Botswana, 2005-2012

- **Covg**
- **New child HIV infections**
- **low**
- **high**

<table>
<thead>
<tr>
<th>Year</th>
<th>Covg</th>
<th>New child HIV infections</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>49%</td>
<td>1,120</td>
</tr>
<tr>
<td>2006</td>
<td>86%</td>
<td>885</td>
</tr>
<tr>
<td>2007</td>
<td>84%</td>
<td>835</td>
</tr>
<tr>
<td>2008</td>
<td>83%</td>
<td>828</td>
</tr>
<tr>
<td>2009</td>
<td>88%</td>
<td>666</td>
</tr>
<tr>
<td>2010</td>
<td>95%</td>
<td>599</td>
</tr>
<tr>
<td>2011</td>
<td>95%</td>
<td>530</td>
</tr>
<tr>
<td>2012</td>
<td>95%</td>
<td>323</td>
</tr>
</tbody>
</table>
Impact: 1.3 million lives saved due to TB/HIV activities

Number of lives saved globally by scaling up collaborative TB and HIV activities, 2005–2011

Source: WHO Global TB Report 2012
02 | Impact: Notification of new cases of TB in relation to the scaling up of ART in Malawi

Notification of new cases of TB in relation to the scaling up of antiretroviral therapy in Thyolo District, Malawi, 2002–2009

Outline

Results: Progress towards Global Targets
- Antiretroviral treatment
- Prevention of mother-to-child transmission
- Treatment for children and key populations
- Treatment of co-infections

Making an Impact: The strategic use of ARVs
- Averting HIV-related deaths
- Reducing new HIV infection

Looking ahead
- Changes in eligibility under 2013 ARV guidelines
- Enhancing impact
Looking ahead: Switch to 2013 guidelines will increase eligibility from 15.9 to 28.6 million people globally.

Number of people eligible for ART in low- and middle-income countries (in millions) per WHO 2010 and 2013 ARV guidelines, based on end of 2012 epidemic situation.
### 03 | Looking ahead: Comparison of immunological criteria for initiating antiretroviral therapy, 2010 and 2013

<table>
<thead>
<tr>
<th>Category</th>
<th>2010 guidelines</th>
<th>2013 guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults and adolescents living with HIV</td>
<td>≤350 CD4 cells/mm³</td>
<td>≤500 CD4 cells/mm³</td>
</tr>
<tr>
<td>Children living with HIV</td>
<td>&lt;24 months old: all</td>
<td>&lt;5 years old: all</td>
</tr>
<tr>
<td></td>
<td>2–5 years old: ≤750 CD4 cells/mm³ or 25%</td>
<td></td>
</tr>
<tr>
<td>Pregnant women living with HIV²</td>
<td>No specific provision</td>
<td>All</td>
</tr>
<tr>
<td>People coinfected with TB and HIV</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>People coinfected with HIV and hepatitis B</td>
<td>All with chronic active hepatitis</td>
<td>All with chronic severe liver disease</td>
</tr>
<tr>
<td>Serodiscordant couples</td>
<td>No specific provision</td>
<td>All</td>
</tr>
</tbody>
</table>

² For their own health, excluding other options with the primary purpose of preventing the mother-to-child transmission of HIV.
04 | Looking ahead: In the long term, ART scale-up will contribute to decreasing ART need

Source: Special analysis conducted by Futures Institute, 2013
04 | Looking ahead: Enhancing impact on mortality and incidence

**Annual HIV related deaths**

- 3.0 m HIV deaths
- Decrease by 39%

**Annual new HIV infections**

- 3.5 m HIV infections
- Decrease by 36%

Source: Special analysis conducted by Futures Institute, 2013
Child – adult coverage gap is widening, other key populations lag behind

Switching from 2010 to 2013 guidelines will enhance impact on lives & epidemic

15 by 15 is within reach

Many countries do well, but some need intensified support

Child – adult coverage gap is widening, other key populations lag behind

HIV treatment scale-up is paying off

Switching from 2010 to 2013 guidelines will enhance impact on lives & epidemic

9.7 million on ART, 1.6 more than in 2011

In high burden countries, ART coverage varies from 30% to 90%

630,000 children on ART, only 64,000 more than in 2011

ARVs saved 4.2 million lives and prevented 800,000 child infections

Eligibility increase from 16 to 29 m
Mortality/ incidence decline by 1/3

Many countries do well, but some need intensified support

In high burden countries, ART coverage varies from 30% to 90%

Child – adult coverage gap is widening, other key populations lag behind

HIV treatment scale-up is paying off

Switching from 2010 to 2013 guidelines will enhance impact on lives & epidemic