HIV in 2013

Epidemiology of a pandemic
Past, present and future

Pr François DABIS
HIV in 2013

Epidemiology of a pandemic

From Rock Hudson († 1985) … to 9.7 million of ART-treated individuals worldwide (12 / 2012)
HIV in 2013 - Overview

Where are we now?

How did we get here?

Challenges

Biomedical prevention: the key to the future?
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GLOBAL REPORT
UNAIDS report on the global AIDS epidemic 2013

Released September 2013
Available at http://www.unaids.org
<table>
<thead>
<tr>
<th>Category</th>
<th>Estimate</th>
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</thead>
<tbody>
<tr>
<td>People living with HIV</td>
<td>35.3 million</td>
</tr>
<tr>
<td></td>
<td>[32.2 million – 38.8 million]</td>
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<tr>
<td>New HIV infections</td>
<td>2.3 million</td>
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<td></td>
<td>[1.9 million – 2.7 million]</td>
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<tr>
<td>Deaths due to AIDS</td>
<td>1.6 million</td>
</tr>
<tr>
<td></td>
<td>[1.4 million – 1.9 million]</td>
</tr>
</tbody>
</table>
Adults and children estimated to be living with HIV in 2012

Total: 35.3 million [32.2 million – 38.8 million]

mid-2010 estimate: 34 million (30.9 – 36.9)
Estimated number of adults and children newly infected with HIV in 2012

- Western & Central Europe: 29,000 [25,000 – 35,000]
- Eastern Europe & Central Asia: 130,000 [89,000 – 190,000]
- Middle East & North Africa: 32,000 [27,000 – 47,000]
- Sub-Saharan Africa: 1.6 million [1.4 million – 1.8 million]
- Eastern Europe & Central Asia: 130,000 [89,000 – 190,000]
- South & South-East Asia: 270,000 [160,000 – 440,000]
- East Asia: 81,000 [34,000 – 160,000]
- Oceania: 2,100 [1,500 – 2,700]
- Caribbean: 12,000 [9,400 – 14,000]
- Central & South America: 86,000 [57,000 – 150,000]
- North America: 48,000 [15,000 – 100,000]
- South & South-East Asia: 270,000 [160,000 – 440,000]

Total: 2.3 million [1.9 million – 2.7 million]

2011 estimate: 2.5 million (2.2 – 2.8)
Over 6 300 new HIV infections per day in 2012 worldwide

- About 95% are in low and middle income countries
- About 700 are in children under 15 years of age
- About 5 500 are in adults aged 15 years and older, of whom:
  - almost 47% are among women
  - about 39% are among young people (15-24)
Estimated adult and child deaths from AIDS in 2012

Total: 1.6 million [1.4 million – 1.9 million]

2011 estimate: 1.7 million (1.5 – 1.9)
Summary of global statistics

The HIV pandemic remains extremely dynamic and is not well controlled
HIV in 2013 - Overview

Where are we now?

Antiretroviral treatment (ART): The big and positive change of the last decade
Number of people receiving antiretroviral therapy (ART) in low- and middle-income countries, by region of the world, 2002–2009
Number of people receiving antiretroviral therapy (ART) in low- and middle-income countries, by region of the world, 2002–2009 ... 9.7 million as of December 2012
Number and percentage of HIV-positive pregnant women in low- and middle-income countries who received antiretroviral medicine to prevent new HIV infections among children, during pregnancy and breastfeeding, 2012

Source: UNAIDS 2012 estimates
HIV in 2013 - Overview

Where are we now?

The trends are encouraging
HIV incidence in France

- 7 000 to 8 000 new contaminations per year (2004-2008)

- The epidemic remains active, especially among MSM (incidence 1% per year)

- Testing and identification of new HIV+ diagnoses is insufficient to control the epidemic
Number of new HIV infections among children in low- and middle-income countries, 2001–2012 and 2015 target

Source: UNAIDS 2012 estimates
The trends of the epidemic in sub-Saharan Africa remains a major preoccupation

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2001</th>
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<tbody>
<tr>
<td>Number of people living with HIV</td>
<td>25.0 million</td>
<td>19.7 million</td>
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<tr>
<td></td>
<td>[23.5 million – 26.6 million]</td>
<td>[18.3 million – 21.2 million]</td>
</tr>
<tr>
<td>Number of new infections</td>
<td>1.6 million</td>
<td>2.3 million</td>
</tr>
<tr>
<td></td>
<td>[1.4 million – 1.8 million]</td>
<td>[2.0 million – 2.5 million]</td>
</tr>
<tr>
<td>Number of children newly infected</td>
<td>230 000</td>
<td>460 000</td>
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<tr>
<td></td>
<td>[200 000 – 280 000]</td>
<td>[260 000 – 640 000]</td>
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<tr>
<td>Number of AIDS-related deaths</td>
<td>1.2 million</td>
<td>1.4 million</td>
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<td>[1.1 million – 1.3 million]</td>
<td>[1.2 million – 1.7 million]</td>
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</table>
Distribution of new infections by mode of exposure in Ghana and Swaziland, 2008

The “Know your epidemic” concept

Note: Sensitivity analysis for Swaziland used different data sources.

Sources: Bosu et al. (2009) and Mngadi et al. (2009).

Figure 3
HIV patterns in France - Summary

• Incidence relatively constant from almost a decade
  7 000 – 8 000 par an

• Mortality
  < 1 000 deaths / year (Source: Mortalité 2010 survey)

• 2010 prevalence: 149 000 (134 000 - 165 000) people living with HIV/AIDS
  28 800 HIV-infected individuals are currently unaware of their HIV+ serostatus and 9 600 are aware but are not in care
Estimated number of tuberculosis-related deaths among people living with HIV, globally and for Africa, 2004–2012

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