“CONTROLLING THE HIV EPIDEMIC” – WHAT DO WE MEAN?

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SCIENCE EVOLVED: SMARTER AND BETTER HIV TREATMENT OPTIONS AVAILABLE

Pre-HAART Era (Mono/Dual Therapy)
- Potency: ↓
- Toxicity: ↑
- AZT (1987)
  2 tablets 3 x day

HAART Era (Triple Therapy)
- Potency: ↑
- Toxicity: ↓
- AZT/3TC + LPV/r (2001)
  3 tablets 2 x day
- TDF/FTC/EFV (2006)
  1 tablet once day

Timeline:
- 1985
- 1987
- 1989
- 1991
- 1993
- 1995
- 1997
- 1999
- 2001
- 2003
- 2005
- 2007
- 2009
- 2011
- 2013
- 2018

Drugs:
- Zidovudine
- Didanosine
- Zalcitabine
- Lamivudine
- Saquinavir
- Nelfinavir
- Nevirapine
- Indinavir
- Ritonavir
- Amprenavir
- Indinavir
- Atazanavir
- Nelfinavir
- Enfuvirtide
- Tenofovir
- Efavirenz
- Delavirdine
- Abacavir
- Lopinavir/ritonavir
- TDF/FTC/EFV

Retroviral agents:
- Tipranavir
- Darunavir
- Maraviroc
- Etravirine
- Raltegravir
- Maraviroc
- Raltegravir

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UNAIDS
By mid-2017, 4.2 million people were receiving antiretroviral treatment in South Africa. Another 2.9 million need access to HIV treatment.

20.9 MILLION PEOPLE ON TREATMENT MID-2017
ON TRACK TO 30 MILLION PEOPLE ACCESSING TREATMENT

Number of people living with HIV ON antiretroviral therapy, global, 2000–mid-2017 and the 2020 target.


As AIDS mortality goes down, economic growth goes up: reductions in mortality account for about 11% of recent economic growth in low-income and middle-income countries as measured in their national income accounts (Lancet, 2013).
ENDING THE AIDS EPIDEMIC BY 2030

Fast-Track Targets

by 2020

90-90-90
Treatment

500,000
New infections among adults

ZERO
Discrimination

by 2030

95-95-95
Treatment

200,000
New infections among adults

ZERO
Discrimination
GAPS IN PROGRESS

15.8 MILLION PEOPLE STILL NEED HIV TREATMENT
Reductions in new infections are off target

New HIV infections, all ages, global, 1990–2016 and 2020 target.

Source: UNAIDS 2017 estimates.

*The 2020 target is fewer than 500,000 new HIV infections, equivalent to a 75% reduction since 2010.
PERCENT CHANGE IN NEW HIV INFECTIONS AMONG ADULTS (AGED 15 YEARS AND OLDER), FROM 2005 TO 2016

Source: UNAIDS 2018
ALARMING RISE IN NEW INFECTIONS IN EASTERN EUROPE AND CENTRAL ASIA

New HIV infections, all ages, global, 1990–2016 and 2020 target

Source: UNAIDS 2017 estimates.
DECLINES IN NEW INFECTIONS VARY BY AGE AND SEX

New HIV infections among adolescents and adults have been declining far too slowly: more than 1.8 million new infections still occur every year worldwide.

NEW HIV INFECTIONS AMONG CHILDREN (AGED 0–14 YEARS) AND COVERAGE OF ANTIRETROVIRAL REGIMENS TO PREVENT MOTHER-TO-CHILD TRANSMISSION, GLOBAL, 2000–2016

FIGURE 2.6. NEW HIV INFECTIONS, YOUNG PEOPLE (AGED 15–24 YEARS), BY SEX, GLOBAL, 1990–2016

Source: UNAIDS 2017 estimates
15 MILLION ADOLESCENT GIRLS HAVE EXPERIENCED SEXUAL VIOLENCE
Globally, 30% of ever-partnered women have experienced physical and/or sexual violence by an intimate partner.

Source: World Bank Group
HIV prevalence among key populations is often substantially higher than it is among the general population.

**DISTRIBUTION OF NEW HIV INFECTIONS, BY POPULATION, GLOBAL, SUB-SAHARAN AFRICA AND COUNTRIES OUTSIDE OF SUB-SAHARAN AFRICA, 2015**


*Only reflects Asia and the Pacific, Latin America and Caribbean regions.
VIETNAM:

9%

OF MSM LIVING WITH HIV HAVE ACCESS TO TREATMENT, COMPARED TO 44% OF MALE ADULTS FROM THE GENERAL POPULATION

Source: UNAIDS GAM 2016
Discriminatory attitudes and ART coverage, by country

USER FEES AN OBSTACLE TO TREATMENT

Source: Medecins Sans Frontiers, Out of Focus (2016).

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WHAT IS NEEDED
Testing coverage, men (aged 16–65 years) and young people (aged 16–24 years), baseline and after 12 months of self-test availability, STAR self-testing project, Malawi, Zambia and Zimbabwe, 2016–2017.

Recommended antiretroviral therapy initiation threshold among people living with HIV per Ministry of Health guidelines, by country, global, MID-2017.

Drawing on the rapidly growing body of data demonstrating the clear preventive and therapeutic effects of early antiretroviral therapy, the World Health Organization (WHO) recommended in 2015 that antiretroviral therapy should be initiated in every person living with HIV at any CD4 cell count. Among the 194 countries that reported information to WHO and UNAIDS, 123 of them—including 29 of 35 Fast-Track countries—I had adopted this treat all approach within their national HIV treatment guidelines. Among the remaining reporting countries, eight continue to limit treatment to people living with HIV who have a CD4 count of 350 cells/mm$^3$ or lower.

INITIAL SHIFTS TOWARDS DOLUTEGRAVIR (DTG) IN LOW- AND MIDDLE-INCOME COUNTRIES (AS OF NOVEMBER 2017)

TDF/3TC(FTC)/EFV as the preferred first line ARV combination among adults and adolescents and initial shifts towards Dolutegravir (DTG) in low- and middle-income countries (situation as of November 2017)

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization

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FIVE PILLARS OF COMBINATION PREVENTION

1. Combination prevention for adolescent girls and young women
2. Combination prevention with key populations
3. Comprehensive condom programmes
4. Voluntary medical male circumcision and sexual and reproductive health services for men and boys
5. Rapid introduction of pre-exposure prophylaxis

EXAMPLE OF A COMBINATION HIV PREVENTION PACKAGE FOR MEN WHO HAVE SEX WITH MEN

Source: UNAIDS 2017-2021 Strategy; On the Fast-Track to End AIDS.
TRAINING FOR STIGMA AND DISCRIMINATION REDUCTION

Percentage of countries that have had training and/or capacity-building on HIV-related rights for people living with HIV and key populations in the past two years, by region, 2016.

Community engagement leads to greater access to treatment and prevention. For an increase of 1 community-based organization per 100,000 people.

64% Increase in likelihood of treatment access (Nigeria)

2x Increase in likelihood of using prevention service (Nigeria)

4x Increase in consistent condom use in the previous 12 months (Kenya)

Use of mobile technology to ensure proper transmission of lab results and reduce turnaround time.

Cities and municipalities that have signed on to the 2014 Paris declaration on ending the AIDS epidemic, 2017.

19 municipalities have signed in Cameroon
34 municipalities have signed in Côte d'Ivoire
17 municipalities have signed in Honduras
3 municipalities have signed in Panama
15 municipalities have signed in Senegal
12 municipalities have signed in South Africa
2 municipalities have signed in Togo
51 municipalities have signed in Zambia
9 municipalities have signed in Spain
15 municipalities have signed in Sierra Leone
31 municipalities have signed in Brazil
FINANCING THE RESPONSE
HIV resource availability by source, 2006-2016, and projected resource needs by 2020, low- and middle-income countries*.


*Estimates for low- and middle-income countries per 2015 World Bank income level classification. All figures are expressed in constant 2016 US dollars.
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**PRICE COMPARISONS**

**1st line**
- TDF/3TC/EFV
- **US$ 106**

**2nd line**
- AZT/3TC/ATV/r
- 2.7 X more expensive than first line
- **US$ 286**

**3rd line**
- RAL+DRV+r+ETV
- 17.4 X more expensive than first line
- no fixed dose combination
- **US$ 1,859**

Source: MSF, Untangling the Web, 2016.
ESTIMATED PREVENTION SPENDING AND RESOURCE NEEDS TO REACH 90% PREVENTION TARGETS (PER FIVE PILLARS)

Source: UNAIDS, June 2017.
Spending on programmes specifically for key populations as a percentage of total prevention spending by source, 2010-2014.

THE RIGHT TO HEALTH

Everyone. Everywhere.

Fulfilling the right to health enables everyone to fulfil their promise and their dreams.
"THE AIDS RESPONSE WAS BOTH A DRIVER OF AND DRIVEN BY THE PROGRESS ACHIEVED AT THE INTERSECTION BETWEEN HEALTH AND HUMAN RIGHTS."
WHAT HAPPENS WHEN YOU ARE EMPOWERED TO MAKE DECISIONS ABOUT YOUR OWN HEALTH?

- You can seek the support of others.
- You can provide support to others.
- You can reduce costs of health care for yourself and the system.
- Your trust in health-care providers, clinics, and hospitals is increased.
- You are better able to look after your health.
- Discrimination is reduced.
- You are more likely to complete prescribed treatment.
- You can prevent others from becoming ill.
- You can detect diseases early.