Avoiding the Cost of Invisibility

Leaving no one behind as we attain 90-90-90

AMB Deborah L. Birx, MD | October, 2016
The Global HIV epidemic today
HIV Prevalence and Estimated Number of Adults and Children Infected with HIV, 2014

This graphic depicts country size relative to the estimated number of its HIV-infected population. Sizes and shapes are distorted in this cartogram, which is presented for illustrative purposes only.

**Adult (15-49) HIV prevalence**
- 0.49% or less
- 0.5% - 2.49%
- 2.5% - 6.49%
- 6.5% - 17.49%
- 17.5% - 28%

Sources: WHO; CDC; UNAIDS; National Health and Family Planning Commission of The People's Republic of China
Percent change in number of new pediatric HIV infections (2000 - 2015)

Source: UNAIDS, 2016; Nigeria data under revision

Source: UNAIDS, 2016; Nigeria data under revision
PEPFAR & the Sustainable Development Goals

1. NO POVERTY
2. NO HUNGER
3. GOOD HEALTH
4. QUALITY EDUCATION
5. GENDER EQUALITY
6. CLEAN WATER AND SANITATION
7. RENEWABLE ENERGY
8. GOOD JOBS AND ECONOMIC GROWTH
9. INNOVATION AND INFRASTRUCTURE
10. REDUCED INEQUALITIES
11. SUSTAINABLE CITIES AND COMMUNITIES
12. RESPONSIBLE CONSUMPTION
13. CLIMATE ACTION
14. LIFE BELOW WATER
15. LIFE ON LAND
16. PEACE AND JUSTICE
17. PARTNERSHIPS FOR THE GOALS

THE GLOBAL GOALS
For Sustainable Development

PEPFAR
U.S. President’s Emergency Plan for AIDS Relief
PEPFAR & the Sustainable Development Goals

1. No Poverty
2. No Hunger
3. Good Health
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation, and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life below Water
15. Life on Land
16. Peace and Justice
17. Partnerships for the Goals
The challenge:
Dramatic increase the number of adolescent girls & women in the highest HIV incident countries and invisible to the current health systems
Dramatic reductions in HIV Incidence Rates
Maintaining momentum is key to achieving epidemic control

HIV Incidence Rate by Region & Year, 1990-2015

Source: UNAIDS, 2016
Youth Bulge in Sub-Saharan Africa: Larger than in China and India, with double the number of 15-24 youth compared to the start of the epidemic.

Figure 4.9 Projected Growth of Youth Population 15–24 Years of Age in Sub-Saharan Africa, China, and India, 1950–2050

By 2030, the youth population in Sub-Saharan Africa will have doubled from the start of the HIV epidemic (1990).

Age-Gender Disparity in New HIV Infections Globally, 2014: Example from South Africa

780,000 new infections primarily driven by infection of young women

Source: UNAIDS 2014 estimates.
Disproportionate Success by Age Group
In Reducing New HIV Infections Over the Course of the Response

New HIV Infections by Population and Year

- Pediatric (0-14 yrs)
- 15 - 24 yrs
- 25 yrs +

Sources: * UNAIDS AIDS info Online Database, 2016; ** 15-24 yrs age group projected based on Africa Development Forum / World Bank 2015, “Africa’s Demographic Transition: Dividend or Disaster?”
HIV Lifecycle in SSA and Investment Priority to Control the Epidemic

DREAMS

ARV Treatment

15-20 yo

25-35 yo

20-30 yo

VMMC

Condoms

HIV
The challenge:

New infections in adults: invisible and expanding epidemics in populations under 25 yo

Source: UNAIDS, 2016
Estimated Number of New HIV Infections and AIDS Deaths by Year

**Kenya**

- **2000**
  - 39,000 New Pediatric
  - 41,000 New Adult (.33)

- **2015**
  - 6000 New Pediatric
  - 71,000 New Adult (.35)

Estimated Number of New HIV Infections and Incidence Rate by Year

Kenya

Number of New Adult (15+) HIV Infections in Kenya by Province (1990-2015)

Source: UNAIDS, 2016
Kenya Clinical Cascade, by Gender, FY15

Female

- PLHIV: 832,632
- Diagnosed: 794,492
- Linked to Care: 657,432
- Currently on ART: 574,280
- Suppressed: 453,681

Male

- PLHIV: 534,291
- Diagnosed: 392,824
- Linked to Care: 314,761
- Currently on ART: 283,192
- Suppressed: 232,217

PLHIV: People Living with HIV
Diagnosed: Number of people diagnosed with HIV
Linked to Care: Number of people linked to HIV care
Currently on ART: Number of people currently on Antiretroviral Therapy
Suppressed: Number of people with suppressed viral load
The Challenge: Living with HIV & Unaware

Review of Preliminary HIV Testing Data From the AIDS Indicator Surveys
APR15: Total PEPFAR Direct Results for HTC and HIV positive people identified

Direct PEPFAR program prevalence: 4.1%

Source: PEPFAR, 2015
Total – Combined country data
Awareness of HIV positive status by age
Pooled data from Malawi, Zambia, & Zimbabwe

Percent of HIV positive individuals aware of their HIV status, by age,
Pooled data from Malawi, Zambia, and Zimbabwe, 2016

Unaware of HIV positive status
Aware of HIV positive status

N= 8,071 individuals
Solution: Testing the right people
Number of Persons Tested and Yield/Positivity by Service Delivery FY16 Q1-Q3 HTC_TST by Service Delivery and Result Disag
PEPFAR Testing Results by Age and Sex
FY16 Q1-Q3 HTC_TST PEPFAR Results

*Countries excluded from this analysis because they report on coarse age bands only: Uganda, Asia Regional, Burma, Cambodia, and Papua New Guinea.
HTS Priorities

- Focus on achieving first “90” through strategic programming with emphasis on data use and yield
- Ensure quality rapid HIV testing service delivery with accurate results
- Develop tools to support testing for partners and family of index patients as a high-yield approach
- Support social/peer-based network testing as a way of reaching undiagnosed key populations
- Explore innovative approaches for reaching young people, and men with HIV self-testing, multi-disease campaigns, and targeting male-friendly venues
Solution: Treat All

Translating science into policy & practice: single public health message
ART initiation policy: 2015

2015 WHO Recommendation: Irrespective of CD4 count

- <200, <250 or <300
- <350
- <500
- >500
- Irrespective of CD4 count
ART initiation policy: 2016

2015 WHO Recommendation: Irrespective of CD4 count

Source: Published policy, September 2016
Viral Load Results for 2015 and Targets for 2016

Viral load and treatment targets from six countries with catalytic funding

2015 Results
2016 Targets
2016 TX_CURR Targets
Epidemic control: Zambia
80% National ART Coverage

National Epidemic Control End of FY 2017

ScaleUp Sat
Sustained
Ctrl Supported
Success is possible
Countries with saturation of VMMC and 90/90 by WAD 2017

<table>
<thead>
<tr>
<th>Circumcision</th>
<th>90/90 for Treatment</th>
</tr>
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<tbody>
<tr>
<td>South Africa</td>
<td>Swaziland</td>
</tr>
<tr>
<td>Kenya</td>
<td>Uganda</td>
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<tr>
<td>Uganda</td>
<td>Zambia</td>
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<td>Rwanda</td>
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<td>Botswana</td>
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<td>Namibia</td>
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<td>Malawi</td>
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Solutions: Preventing New Infections: DREAMS and VMMC
Young women and girls account for 75% of new HIV infections among adolescents in sub-Saharan Africa. This must change.
The DREAMS Partnership

• Launched on World AIDS Day 2014 for 10 countries

• Initial $385 million partnership
  – 2014 Launch Partners PEPFAR, Bill & Melinda Gates Foundation, and Girl Effect
  – In 2015 we added Johnson & Johnson, ViiV Healthcare and Gilead Sciences

• DREAMS countries received additional funding (above the $385M) to scale up VMMC and treatment for men in DREAMS districts

• Innovation Challenge Fund winners announced in July 2016
  – 800 ideas, 56 winners (60% small CBOs)
Solutions must be ready for rapid implementation in one or more of the 10 DREAMS countries:

- Kenya
- Lesotho
- Malawi
- Mozambique
- South Africa
- Swaziland
- Tanzania
- Uganda
- Zambia
- Zimbabwe
Percentage of 13-24 Year Old Female Respondents Who Reported First Sex as Forced/Coerced - RAPE

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage experienced force sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>15.8%</td>
</tr>
<tr>
<td>Haiti</td>
<td>23.3%</td>
</tr>
<tr>
<td>Kenya</td>
<td>22.0%</td>
</tr>
<tr>
<td>Malawi</td>
<td>38.4%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>24.3%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>54.4%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>32.8%</td>
</tr>
<tr>
<td>Zambia</td>
<td>27.2%</td>
</tr>
<tr>
<td>Zimbabwe*</td>
<td>40.7%</td>
</tr>
</tbody>
</table>

*Data for Zimbabwe only available for 18-24 year old female respondents.

Source: VACS, 2016
Sexual Violence among 13-24 Year Old Female Respondents Within the Past 12 Months

Country

Cambodia
Haiti
Kenya
Malawi
Nigeria
Swaziland
Tanzania
Zambia
Zimbabwe*  

Percentage experienced sexual violence

8.0%  
40.5%  
36.2%  
33.6%  
35.2%  
49.1%  
33.7%  
31.6%  
8.5%  

*Data for Zimbabwe only available for 13-17 year old female respondents.

Source: VACS, 2016
Percentage of Females Reporting First Sexual Violence Incident Prior to Age 18 was Perpetrated by a Boyfriend/Partner

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage reported IPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>24%</td>
</tr>
<tr>
<td>Haiti</td>
<td>29%</td>
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<tr>
<td>Kenya</td>
<td>47%</td>
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<tr>
<td>Malawi</td>
<td>33%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>40%</td>
</tr>
<tr>
<td>Zambia</td>
<td>53%</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>78%</td>
</tr>
</tbody>
</table>

*Data not available for Tanzania and Swaziland

Source: CDC VACS, 2016
VAC and HIV Testing: Prevalence of ‘Never HIV-Tested’ among 13-17 Year Olds Reporting Past-Year Sexual Violence

Country |
--- |
Cambodia |
Haiti |
Kenya |
Malawi |
Nigeria |
Tanzania* |
Zambia |
Zimbabwe |

Percentage Never HIV-Tested:

- Cambodia: 93%
- Haiti: 76%
- Kenya: 45%
- Malawi: 36%
- Nigeria: 17%
- Tanzania*: 56%
- Zambia: 38%
- Zimbabwe: 37%

*Tanzania is among 13-24 year old girls

Source: VACS, 2016

Note: Data not available for Swaziland
Association Between Childhood Sexual Violence and Selected Health Conditions, Females 13 to 24 Years of Age, Swaziland, 2007

The Core Package

Mobilize Communities for change

Reduce Risk of Sex Partners

Characterization of male partners to target highly effective interventions (ART, VMMC)

Youth-friendly sexual and reproductive health care (Condoms, HTC, PrEP, Contraceptive Mix, Post-violence care)

Empower Girls & Young Women and reduce risk

School-Based Interventions

Social Asset Building

Social Protection (Cash Transfers, Education Subsidies, Combination Socio-Economic Approaches)

Strengthen Families

Mobilize Communities

Community Mobilization & Norms Change

Parenting/caregiver Programs
DREAMS Programming

**STRENGTHEN THE FAMILY**
- Parenting/Caregiver Programs
- Cash Transfers
- Education Subsidy
- Socioeconomic Approaches

**MOBILIZE COMMUNITY FOR CHANGE**
- School-Based HIV & Violence Prevention
- Community Mobilization & Norms Change

**EMPOWER AGYW & REDUCE RISK**
- Condom Promotion & Provision
- HIV Testing & Counseling
- PrEP
- Post-Violence Care
- Increased Contraceptive Method Mix
- Social Asset Building
Annual Number of PEPFAR-Supported Voluntary Medical Male Circumcisions, through 2015 – Impact of Tetanus Vaccination in 2015

Uganda VMMC down by 500K

Source: PEPFAR, 2015

2015 Decline Primarily Single Country Uganda and Tetanus
Site Improvement Through Monitoring System (SIMS) Data for Program Quality

Distribution of SIMS Scores by VMMC CEE
October 2014-September 2015

379 assessment, 339 facility and 28 above site

5.1 Voluntarism and Informed Consent
- 18 19 71 231

5.2 Adverse Event Prevention and Management
- 68 57 74 129

5.3 VMMC Clinical Follow-Up
- 36 17 92 186

5.4 HTC Referrals to HIV Care and Treatment
- 93 29 50 153

5.5 VMMC QM/QI
- 3 6 7 12

Source: PEPFAR, 2015
Solution: Preventing New Infections: PrEP
PrEP in DREAMS

Countries implementing PrEP with PEPFAR support

• Kenya
• South Africa
• Swaziland
• Uganda
• Zimbabwe
• Other 5 countries continuing conversations with government

Target Populations

• Sex workers
• Young women engaged in transactional sex
• Young women in serodiscordant couples
• Young women in fishing villages

Implementation Science

• What are potentially effective strategies for introducing PrEP for AGYW (e.g., acceptance, feasibility)? Different for various subgroups?
PEPFAR and PrEP

• PEPFAR supporting country teams to
  o Add PrEP as a component of evidence-based combination prevention
  o Work with partner country governments, civil society, and other stakeholders to address issues that are critical to the rapid scale-up of PrEP among populations at substantial risk

• PEPFAR funding may be used for procurement of PrEP commodities in countries where policies include
  o Test and START for all PLHIV,
  o Routine use of at least annual VL testing, and
  o Service delivery models allowing 3-6 months of ARV provision to PLHIV

• PEPFAR supports PrEP programs beyond DREAMS countries and other African countries
Key Populations
Addressing stigma and leaving no one behind
Key Populations Vary by Location

Source: UNAIDS, 2014
Tanzania threatens to ban groups supporting gay rights

By Kizito Makoye

DAR ES SALAAM (Thomson Reuters Foundation) - Tanzania is considering a bill that governmental groups that "promote" the rights of lesbian, gay, bisexual, and intersex (LGBT) people in the first public statement against the minority group.

Gay sex is illegal in Tanzania and punishable by up to 3 years in prison.

The East African country has a reputation for being more tolerant than its neighbor Uganda but recent comments attacking and condemnation from activists.

In a statement late on Wednesday, the deputy minister for development and gender, Hamisi Kigwangala, said the government would "not protect the traditional values seriously and would "always protect the values and beliefs that are the foundation of the culture of this country."

Uganda says police will arrest planners of gay pride parade

Published September 21, 2016 - Associated Press

A bailiff in Bauchi, in mostly Muslim northern Nigeria, re-enacted the lashing of a man convicted of homosexuality. Benedicte Kurzen for The New York Times

Stigma in Jamaica – Reported by Health Care Staff

- Received less care than other patients
- Assigned by senior provider to junior provider
- HIV tested without consent
- Status (HIV, MSM, SW) gossiped about by health care provider
- Refused health care services

<table>
<thead>
<tr>
<th></th>
<th>SW</th>
<th>MSM</th>
<th>PLHIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refused health care services</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Status (HIV, MSM, SW) gossiped about by health care provider</td>
<td>8</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>HIV tested without consent</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Assigned by senior provider to junior provider</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Received less care than other patients</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: FHI360 & PEPFAR, 2012
Key Populations

Key populations supported by PEPFAR include:

• Sex workers (SW),
• People who inject drugs (and other people who use drugs) (PWID),
• Men who have sex with men (MSM),
• Transgender persons, and
• People in prisons and other closed settings
THAILAND
LAOS
SOUTH AFRICA
MSM Clinical Cascades in Laos & Thailand: Gap in testing part of the cascade not linking

Source: PEPFAR, Asia Regional Program, 2016
South Africa: Different clinical cascade issues with different key populations – data allowing teams to focus on precise issues

**SW**

- **Johannesburg**
  - Aware HIV+: 73.80%
  - Sought Care: 19.10%
  - On ART: 27.70%

- **Cape Town**
  - Aware HIV+: 56.70%
  - Sought Care: 25.60%
  - On ART: 55.20%

- **eThekwini**
  - Aware HIV+: 67.40%
  - Sought Care: 42.60%
  - On ART: 27.70%

**MSM**

- **Gert Sibande**
  - Aware HIV+: 15%
  - Linked to Care: 25%
  - On ART: 10%

- **Ehlanzeni**
  - Aware HIV+: 10%
  - Linked to Care: 20%
  - On ART: 5%
Key Populations

• Overall greater PEPFAR engagement on stigma, human rights, and legal barriers, and engagement of civil society that includes and benefits key populations

• Geographic pivots must also include ensuring coverage for key populations, and can include urban settings and hotspots as priority sites outside of areas with HIV prevalence in the general population

• Special Initiatives that support Key Populations in addition to regular annual country or regional program funds:
  • **Key Populations Challenge Fund** (5 countries & 6 regional programs) for additional program support and expansion of successful KP service delivery models
  • **Key Populations Implementation Science Initiative** (9 countries)
  • **Local Capacity Initiative** with a KP component (6 countries & 2 regional programs)
  • Support to Robert Carr Foundation
  • DREAMS included focus on young FSW (7 countries)
  • New collaboration with Elton John Foundation
  • Key Population Investment Fund $100 million
Key Populations Investment Fund

PEPFAR launched $100M Key Populations Investment Fund at the UN High Level Meeting in June, 2016

• Supports multi-year and comprehensive approaches with direct funding to key population-led community based organizations to develop and improve their capacity for sustainable HIV responses at the local level driven by data and accountability.

• Supports innovative, tailored, community-led approaches to address critical issues and gaps that exist for key populations in the HIV/AIDS response

• PEPFAR is committed to engaging civil society in planning and implementation of the Investment Fund
Complex factors driving stigma & discrimination that must be measured and addressed

Identify  Measure  Change
Key Populations Investment Fund: Addressing Specific Barriers

In order to ensure nobody is left behind, we must address the lack of:

- Acceptance of human rights of all persons, without distinction;
- Systematic and rigorous measurement and monitoring of stigma and discrimination and clear actions to mitigate;
- Access to quality services for key populations;
- Availability of disaggregated data by key populations; and
- Focus on improving the capacity of key populations-led community based organizations not only to advocate for changes in policies but also directly implement services.
Empowering civil society
The World Was Slow to Recognize the AIDS Crisis
Civil Society Plays Critical Role in HIV Response

• We would not have a global HIV response if not for civil society groups that demanded it
• People living with HIV should play a meaningful role in shaping HIV programs & have powerful voices within their countries
• Support from donors has been inadequate
• We can all do more to support efforts of networks of PLHIV and civil society groups
Engaging Civil Society in PEPFAR

- Civil Society is actively engaged in quarterly PEPFAR Oversight and Accountability Response Team (POART) meetings; country teams are charged with soliciting input and providing feedback to CSOs on quarterly data and POART meetings.

- PEPFAR HQ conducted regional webinars, in conjunction with UNAIDS, to outline COP 16 guidance, solicit input on the draft guidance, and highlight best practices in CSO engagement.

- Most PEPFAR country teams debriefed community and CSOs on outcomes of DCMM and proposed changes from COP15 SDS including goals, budgets, targets, and current performance.
Summary

Key take-away messages: using data to identify the issues and the solutions
Core PEPFAR Issues Moving Forward

Need Prevention Cascade for DREAMS and VMMC

Clear **denominator** : Number needed to be reached at the district or county level disaggregated by age and gender
Clear **numerator** : Number reached with DREAMS, OVC adolescent prevention, VMMC

**Gap and plan to close the gap**
Mobilizing resources, addressing core policy and implementation issues

**Importance of a community engagement plan for both advocacy as well as community led program implementation**

**Key population Cascades for each risk group**

**Accurate denominator** : Number needed to be reached at the district or county level disaggregated by **age**

**Gap and plan to close the gap**
Mobilizing resources, addressing core policy and implementation issues
Need for Continuous Assessment of The Epidemic in Real Time

• Recency assay in ANC
• Rapid an interim utilization of PHIA data as it maybe regionally applicable and extend beyond the specific country to provide critical insights
  • Treatment coverage and viral suppression in the <30yrs is most likely less than 25% with status awareness less than 50%
• Improved partner performance using quarterly data and cost analysis
• Clear measurement of stigma and holding all of us accountable for progress
Going forward

• It is not enough to know there are areas of higher transmission but need to understand the primary transmission zones by age group and population

• More aggressive prevention for young women 15-19 utilizing any successful elements out of the DREAMS districts and expansion of PrEP in the highest transmission zones

• Continued expansion of VMMC
  • Expanding to under 14 in high preforming countries

• PrEP for men found to be negative in the 20-30 age range in high transmission zones and ensure all men under 30 have been tested
Human rights remain central to a successful HIV response

• History has shown that both in the US and globally, we cannot fight the HIV/AIDS epidemic without prioritizing protection of basic human rights for all.

• Key populations including sex workers, men who have sex with men, and people who inject drugs tend to be particularly vulnerable to human rights abuses and we must work together to protect and promote rights for all people.
Our work is far from done.

Over 2,800 babies were infected with HIV

Over 37,000 adults were infected with HIV, of which more than 7,500 were young women

Over 2,000 children died this week from HIV

Over 19,200 adults died this week from HIV
Thank You!