



PEPFAR

U.S. President's Emergency Plan for AIDS Relief

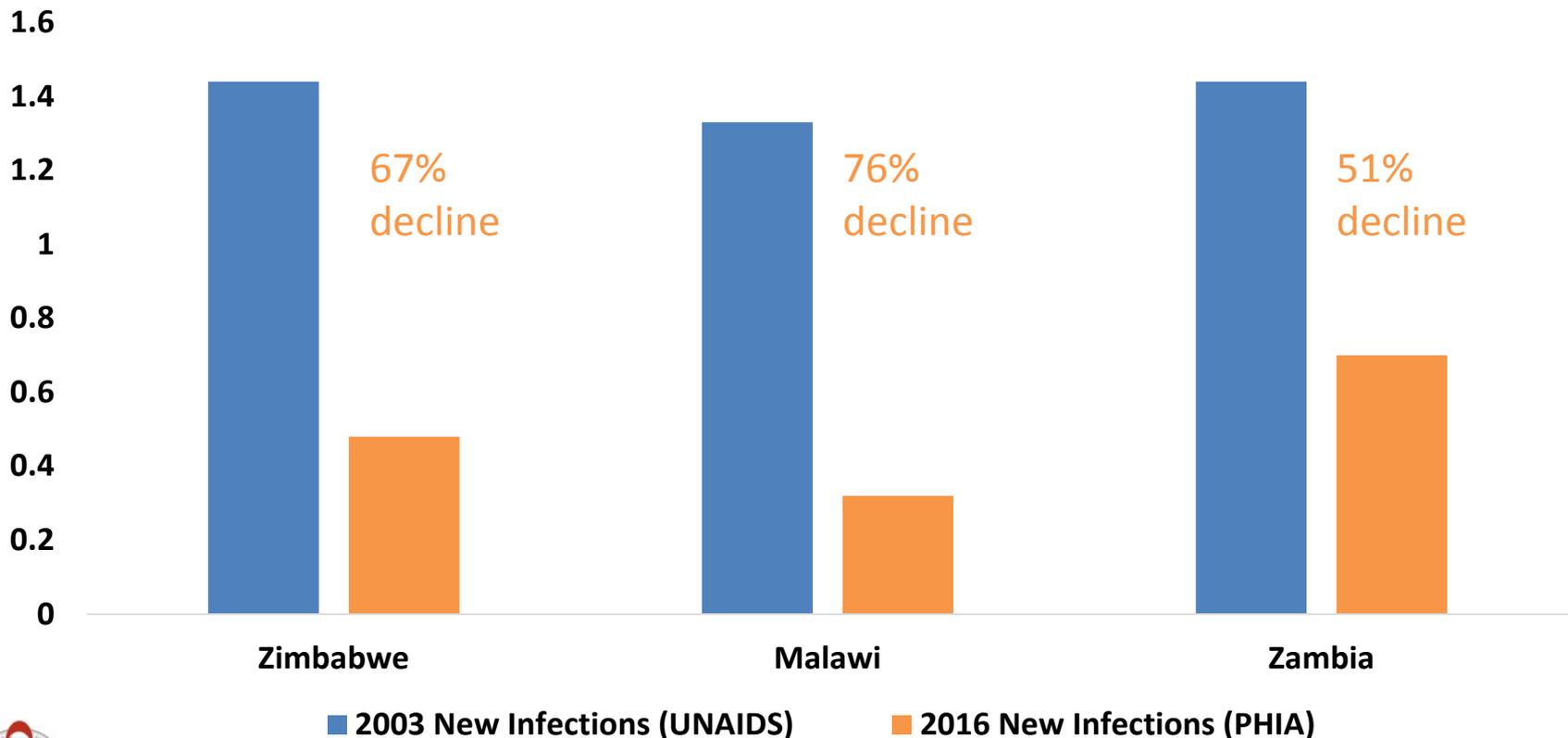
HIV in Women

Why We Need Female-controlled Prevention

Heather Watts, MD | March 21, 2017

Since the Start of PEPFAR, New HIV Infections Have Declined 51-76%

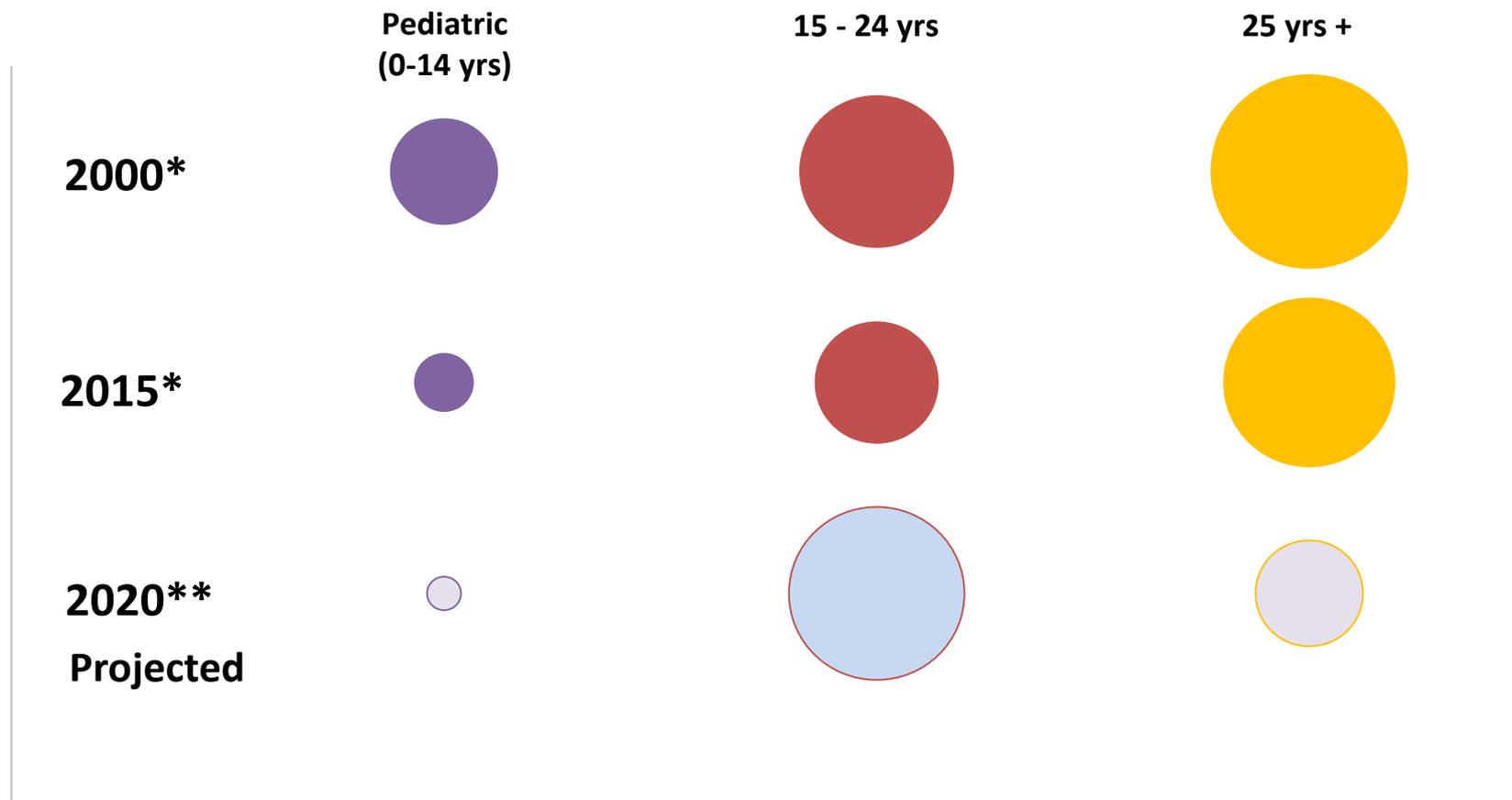
Reduction in rate of new HIV infections (incidence rate) during 12 years of PEPFAR implementation



Source: UNAIDS & PHIA IMPACT Studies, 2016

Disproportionate Success in Epidemic Control by Age Group

New HIV Infections by Population and Year

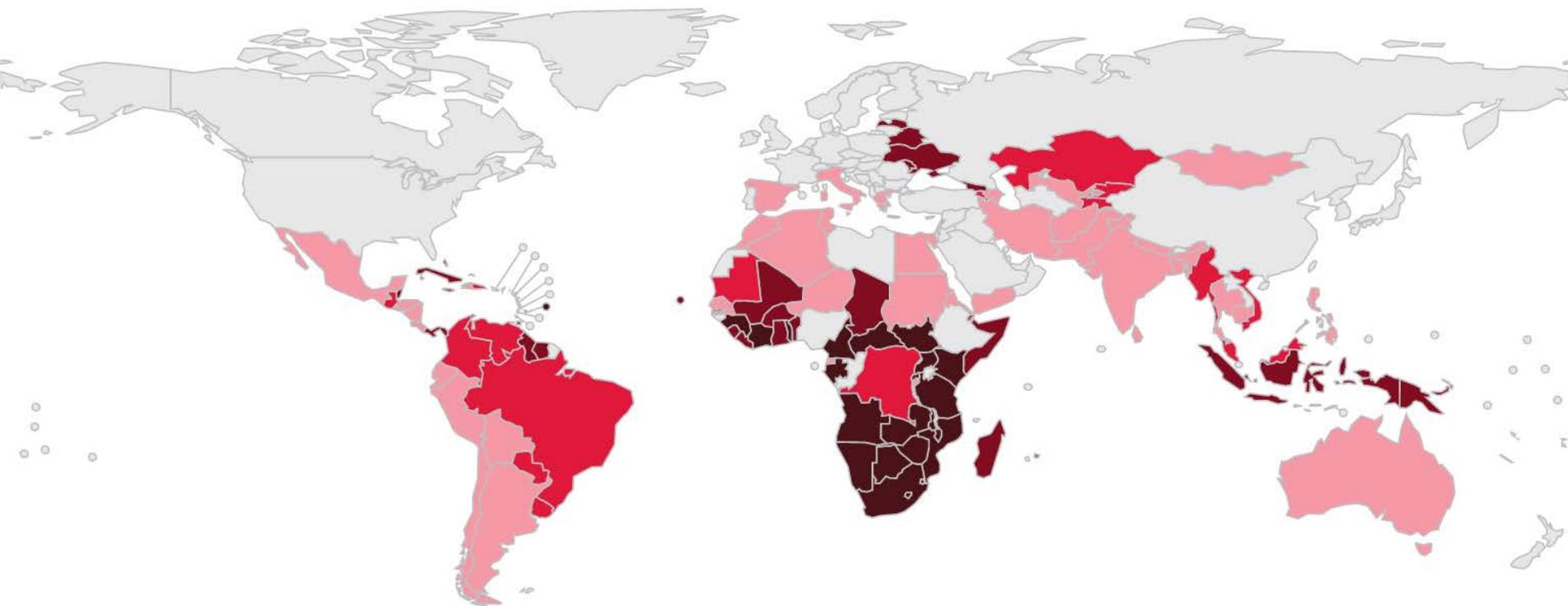


Sources: * UNAIDS AIDS info Online Database, 2016; ** 15-24 yrs age group projected based on

 U.S. President's Emergency Plan for AIDS Relief / Africa Development Forum / World Bank 2015, "Africa's Demographic Transition: Dividend or Disaster?"

Incidence of New HIV Infections 2015

UNAIDS



0.12+ %

0.05 - 0.12 %

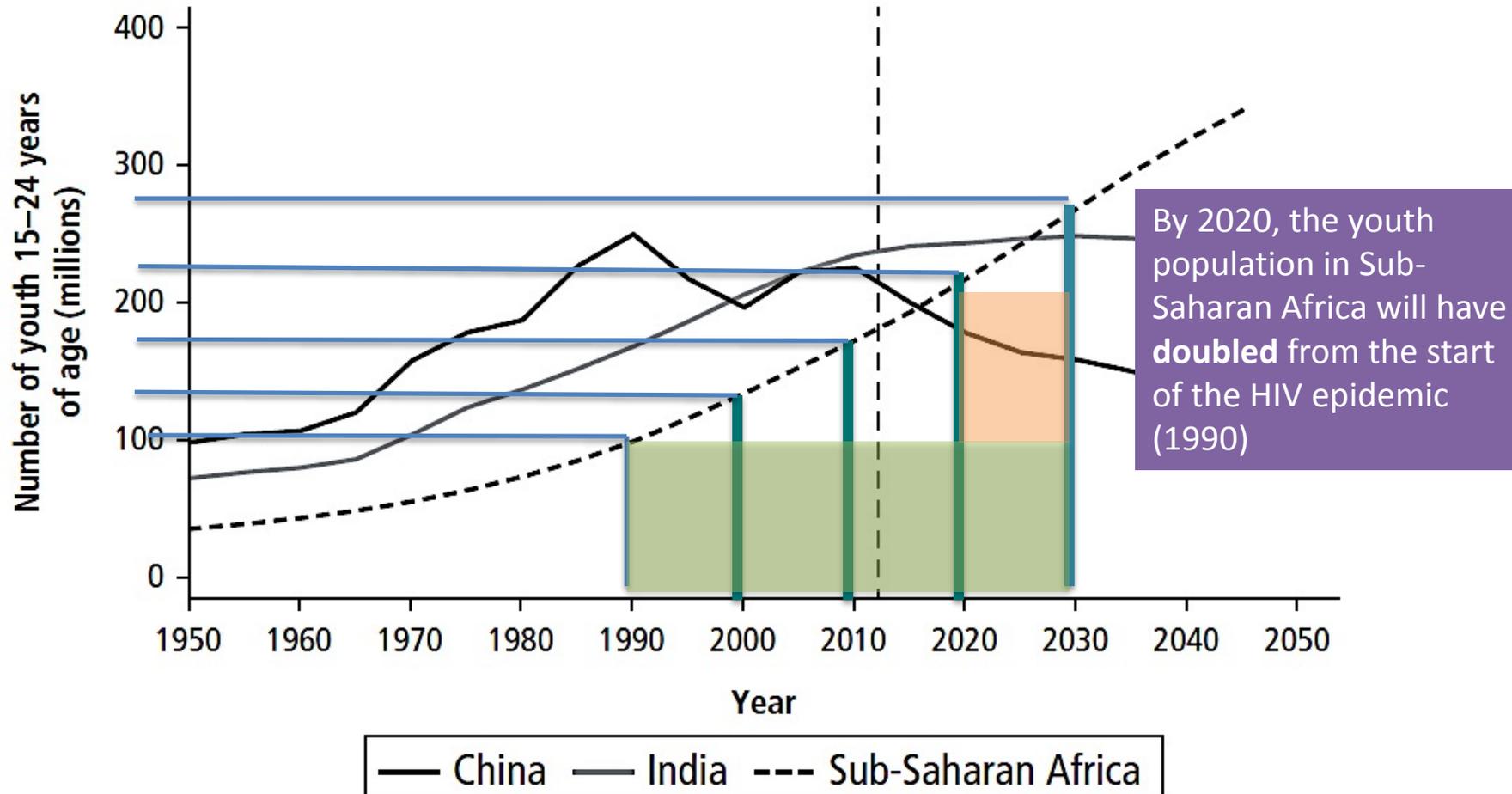
0.02 - 0.05 %

< 0.02 %

No data

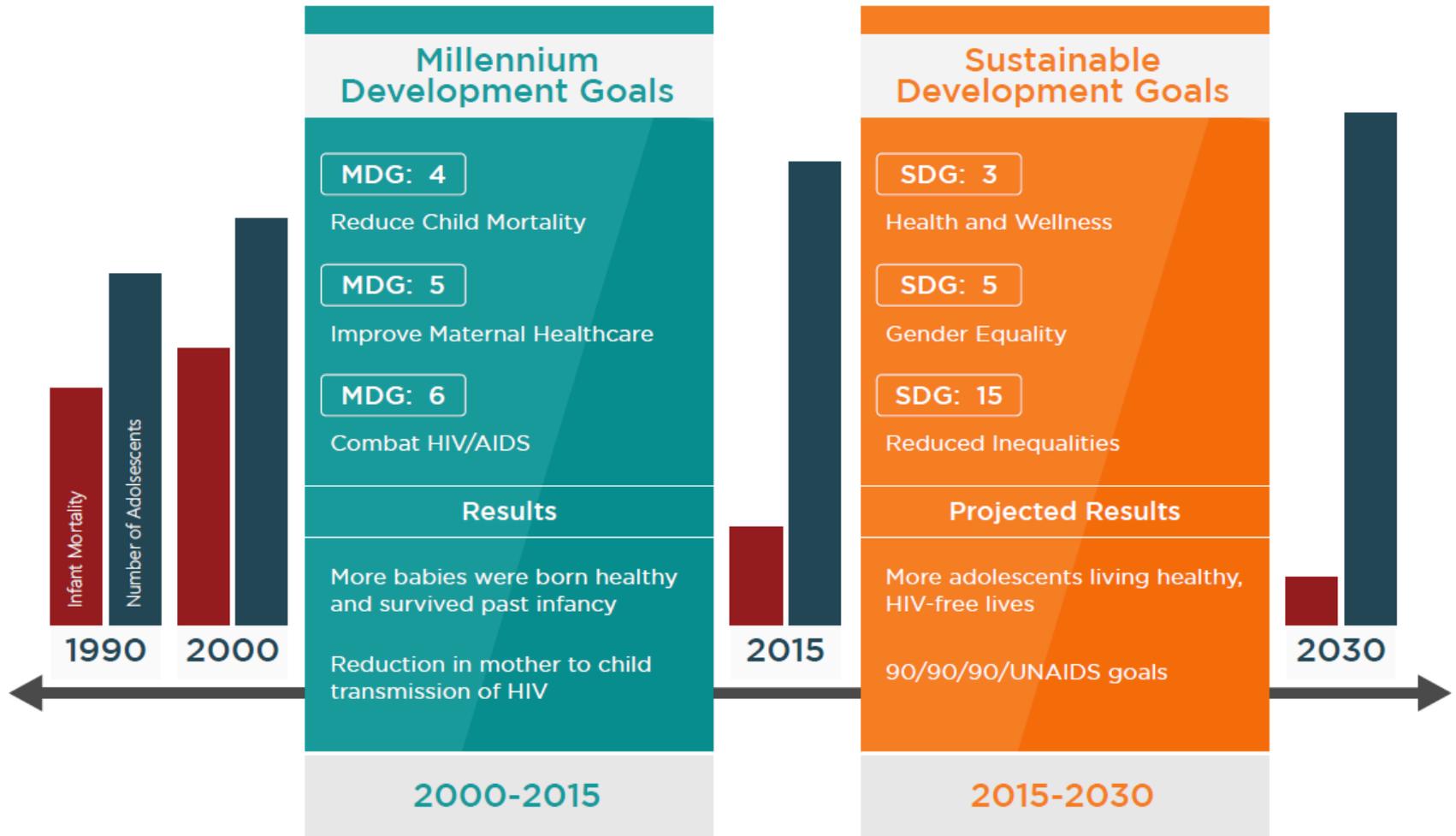
Youth Bulge in Sub-Saharan Africa: Larger than in China and India, with double the number of 15-24 youth compared to the start of the epidemic

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



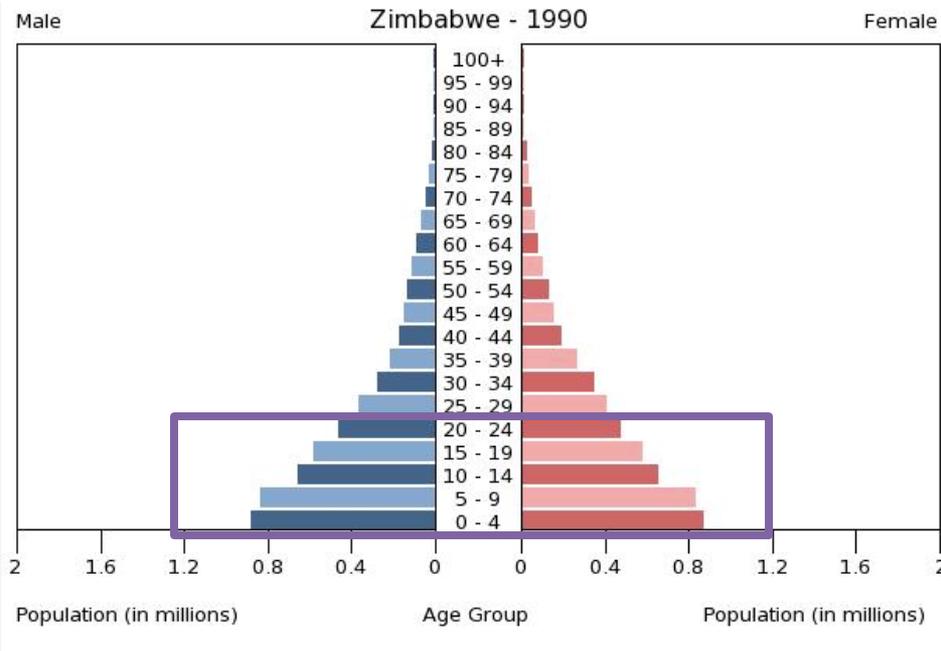
Understanding the Youth Bulge: Why are there more adolescents than ever before?

The Millennium Development Goals helped more babies stay healthy and live longer – now the Sustainable Development Goals aim to help this new generation of adolescents stay HIV-free



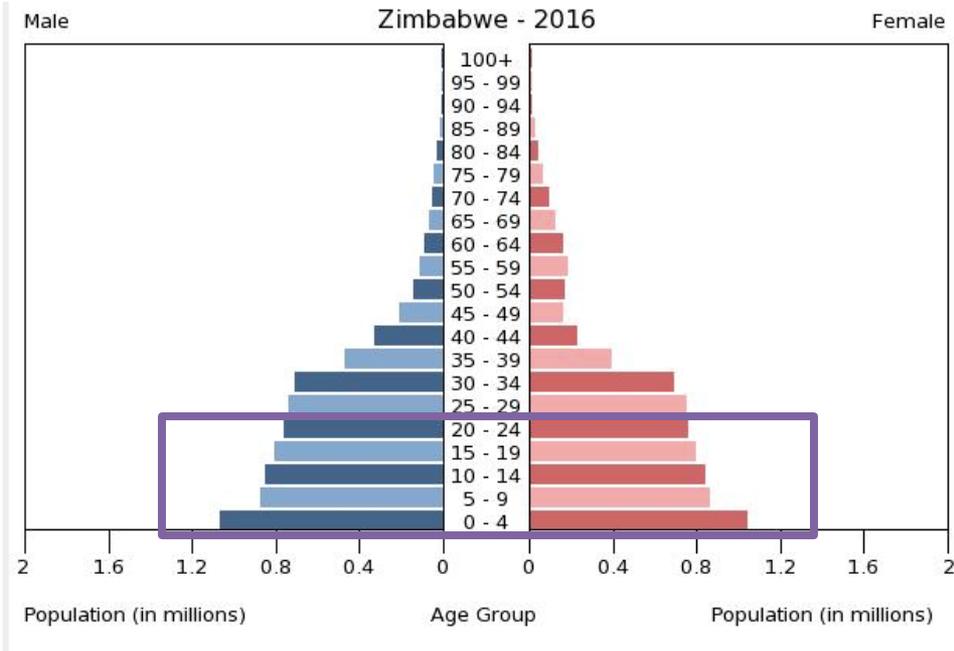
Youth Bulge in Zimbabwe

At the beginning of the Epidemic



Young Men Population: 1 million
 Young Men PLHIV: 72,000
 Young Women Population: **1 million**
 Young Women PLHIV: **119,000**

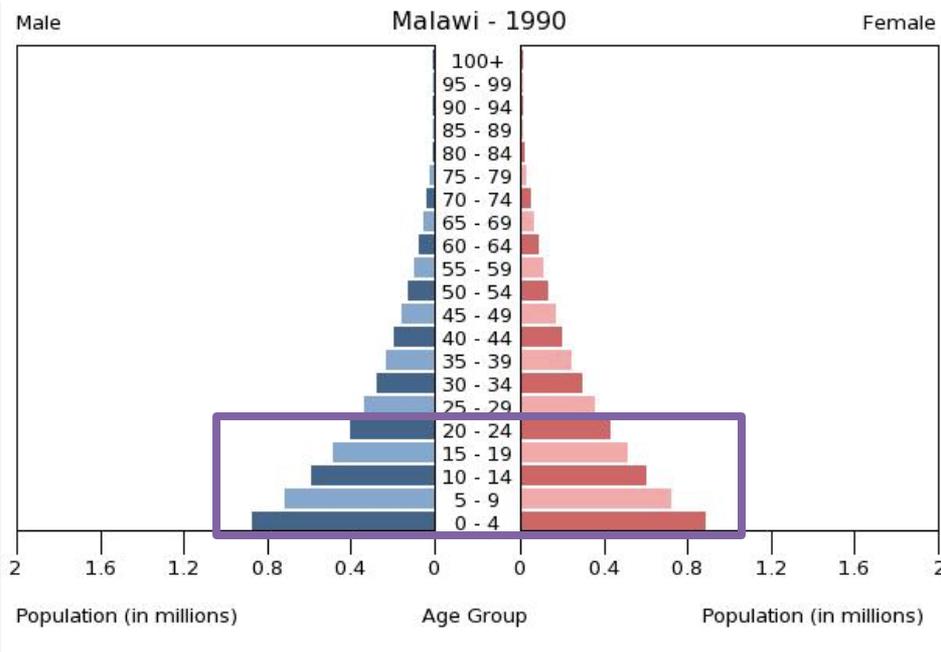
Today



Young Men Population: 1.6 million
 Young Men PLHIV: 59,000
 Young Women Population: **1.5 million**
 Young Women PLHIV: **91,000**

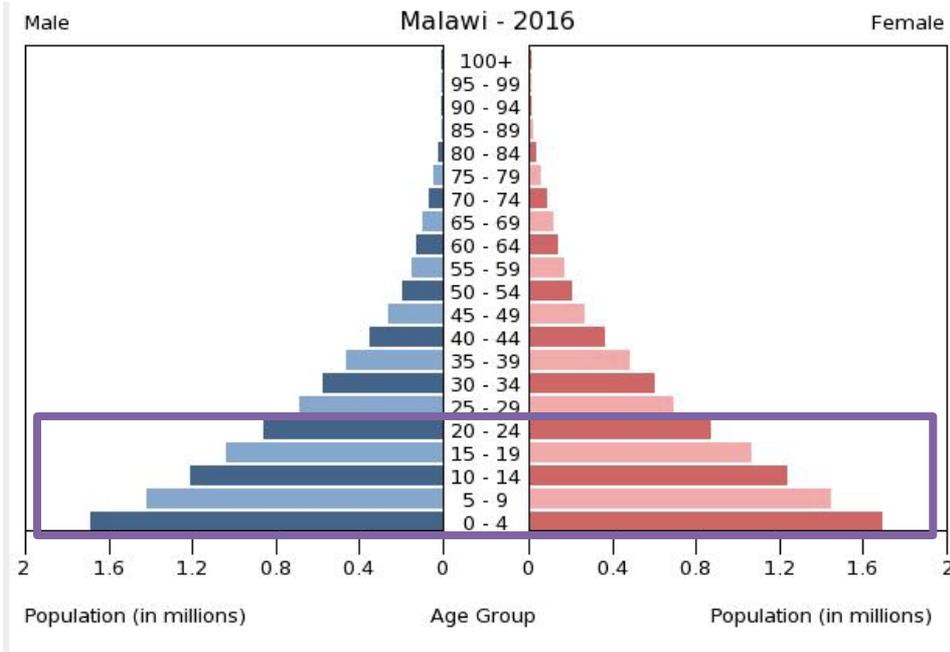
Youth Bulge in Malawi

At the beginning of the Epidemic



Young Men Population: 880,000
 Young Men PLHIV: 23,000
 Young Women Population: **922,000**
 Young Women PLHIV: **62,000**

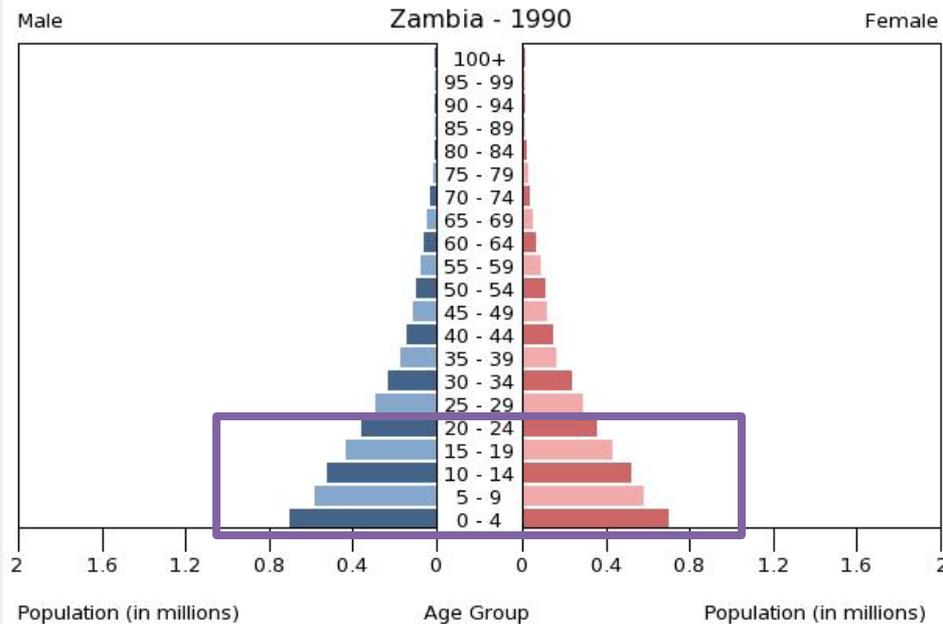
Today



Young Men Population: 1.9 million
 Young Men PLHIV: 34,000
 Young Women Population: **1.9 million**
 Young Women PLHIV: **61,000**

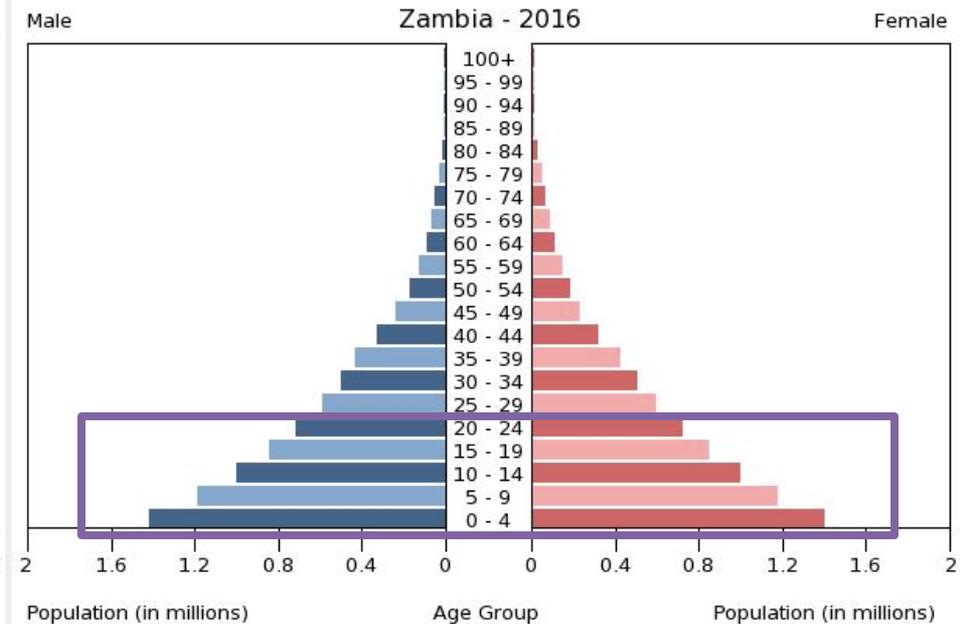
Youth Bulge in Zambia

At the beginning of the Epidemic



Young Men Population: 781,000
 Young Men PLHIV: 38,000
 Young Women Population: **772,000**
 Young Women PLHIV: **66,000**

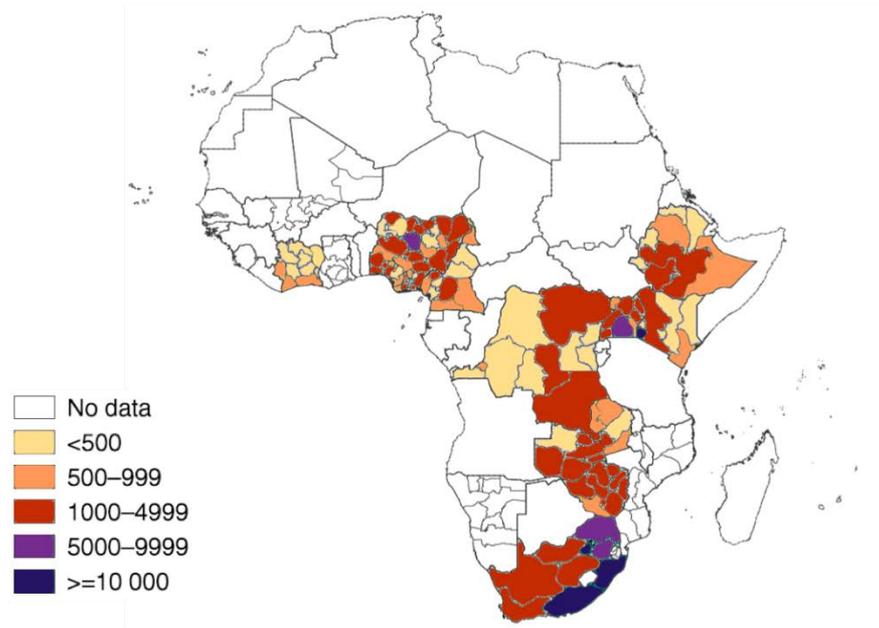
Today



Young Men Population: 1.6 million
 Young Men PLHIV: 48,000
 Young Women Population: **1.6 million**
 Young Women PLHIV: **77,000**

New HIV Infections among adolescent girls and young women

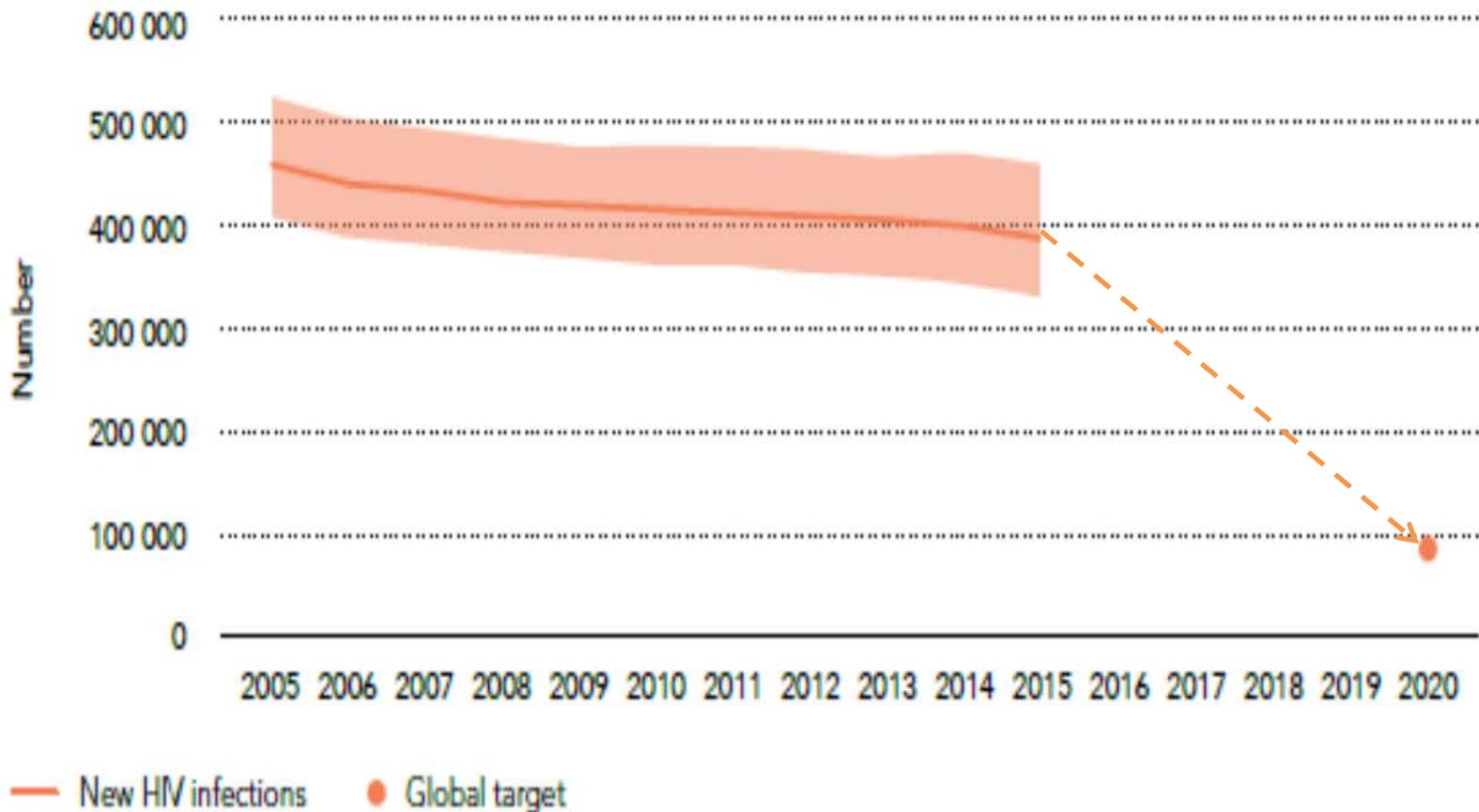
New HIV infections among adolescent girls and young women (aged 15–24), sub-Saharan Africa, 2014



Source: UNAIDS estimates, 2014.

Source: UNAIDS, 2015

New HIV infections among young women (aged 15–24 years), global, 2005–2015

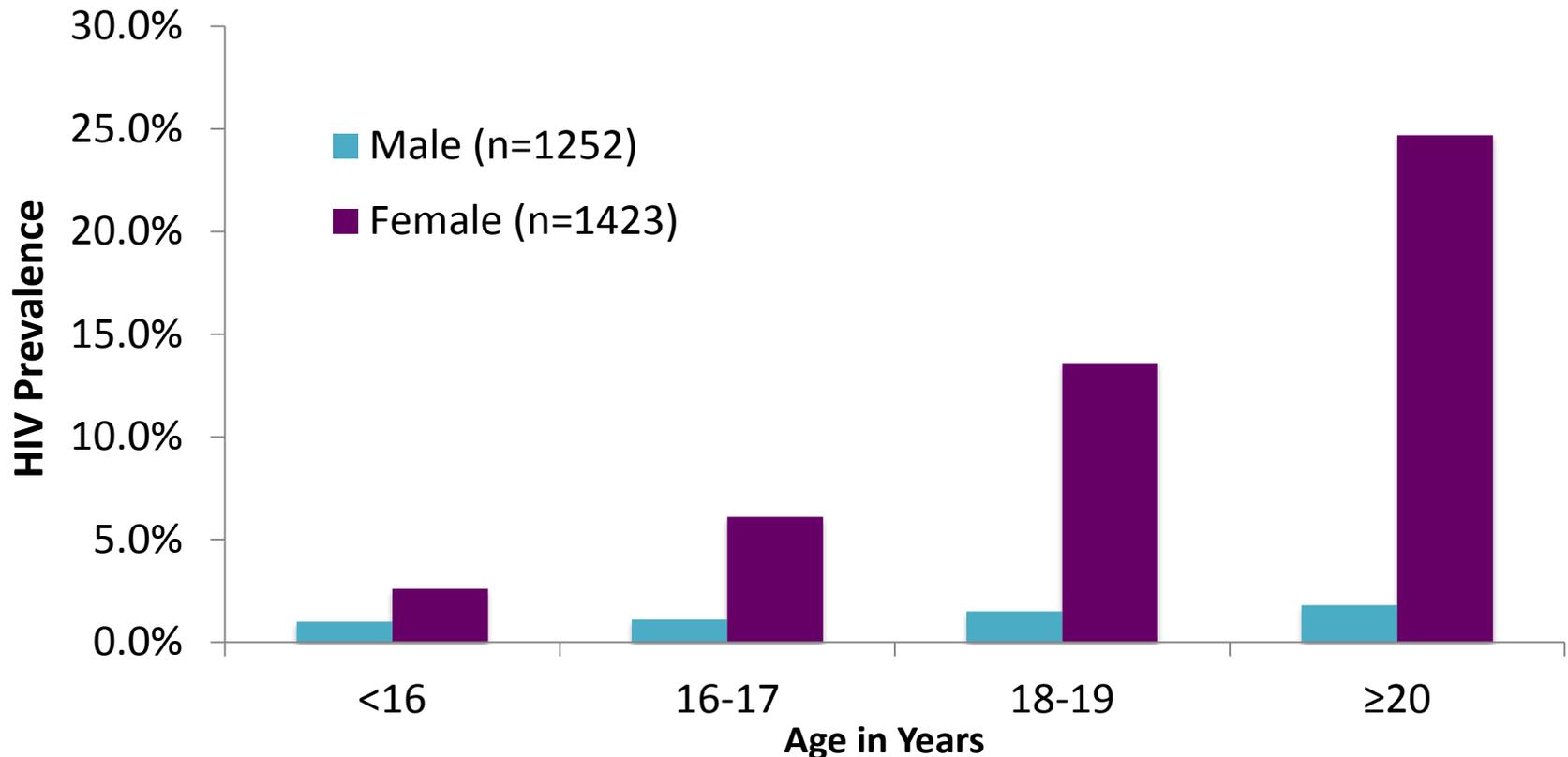


Source: UNAIDS 2016 estimates.



Stark Disparity in HIV Prevalence in young women & young men

Prevalence of HIV among high school students in rural KwaZulu-Natal, South Africa (2014)



Source: Abdool Karim Q, 2014

Determined

Resilient

Empowered

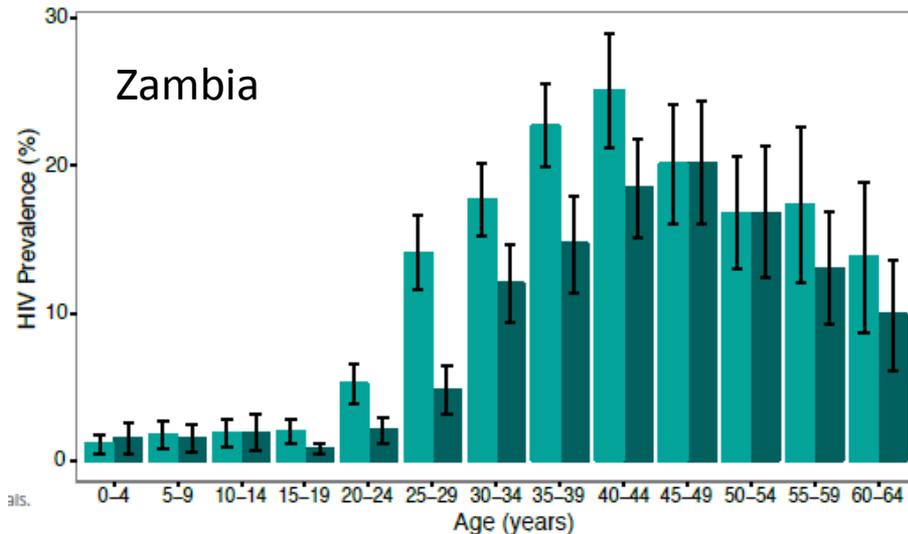
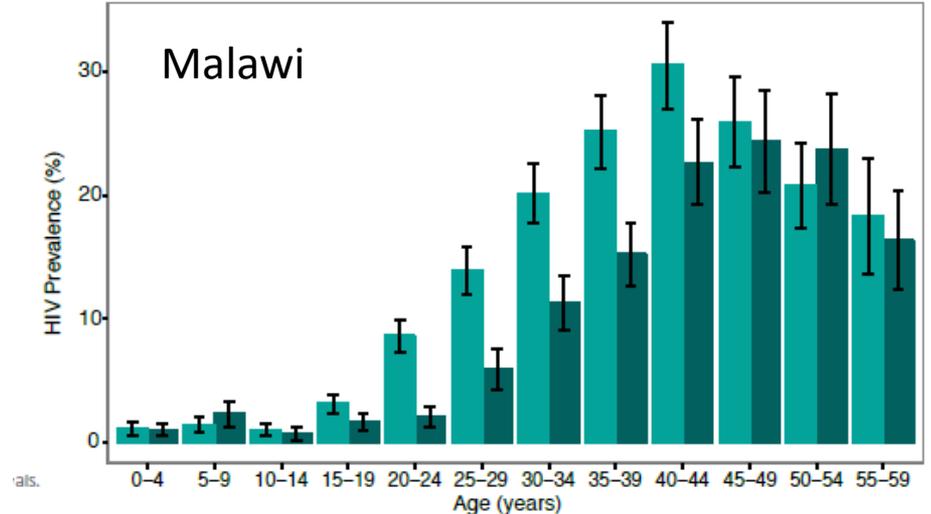
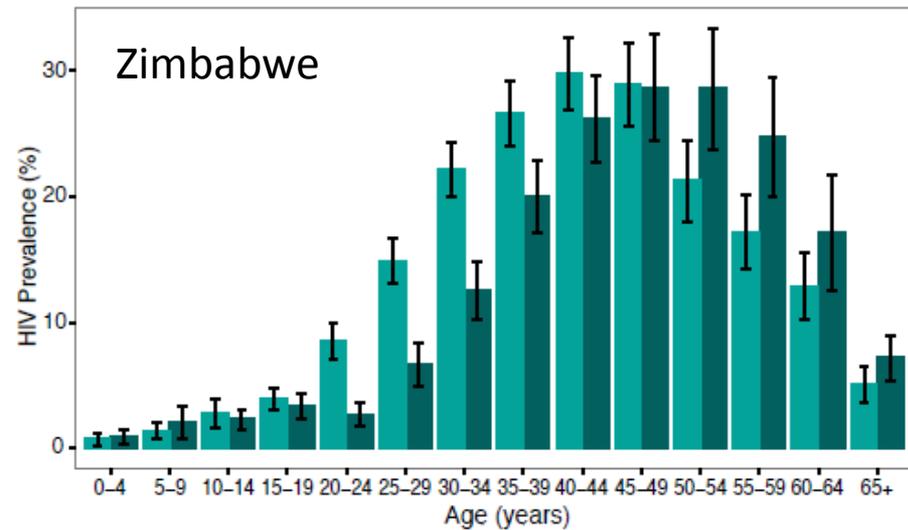
AIDS-Free

Mentored

Safe

HIV Prevalence by Age and Sex

Population-based HIV Impact Assessments



Compared to young men,
the rate of new HIV infections
in young women is

- 5 times greater*** in Zimbabwe
- 8 times greater*** in Malawi
- 14 times greater*** in Zambia

Legend:
■ Females
■ Males
Error bars represent 95% confidence intervals.

Acknowledgments for Impact Surveys

OGAC	CDC – Atlanta	ICAP – New York
Ministry of Health and Child Care, Zimbabwe	CDC – Zimbabwe	ICAP in Zimbabwe
Ministry of Health, Malawi	CDC – Malawi	ICAP in Malawi
Ministry of Health, Zambia	CDC – Zambia	ICAP in Zambia

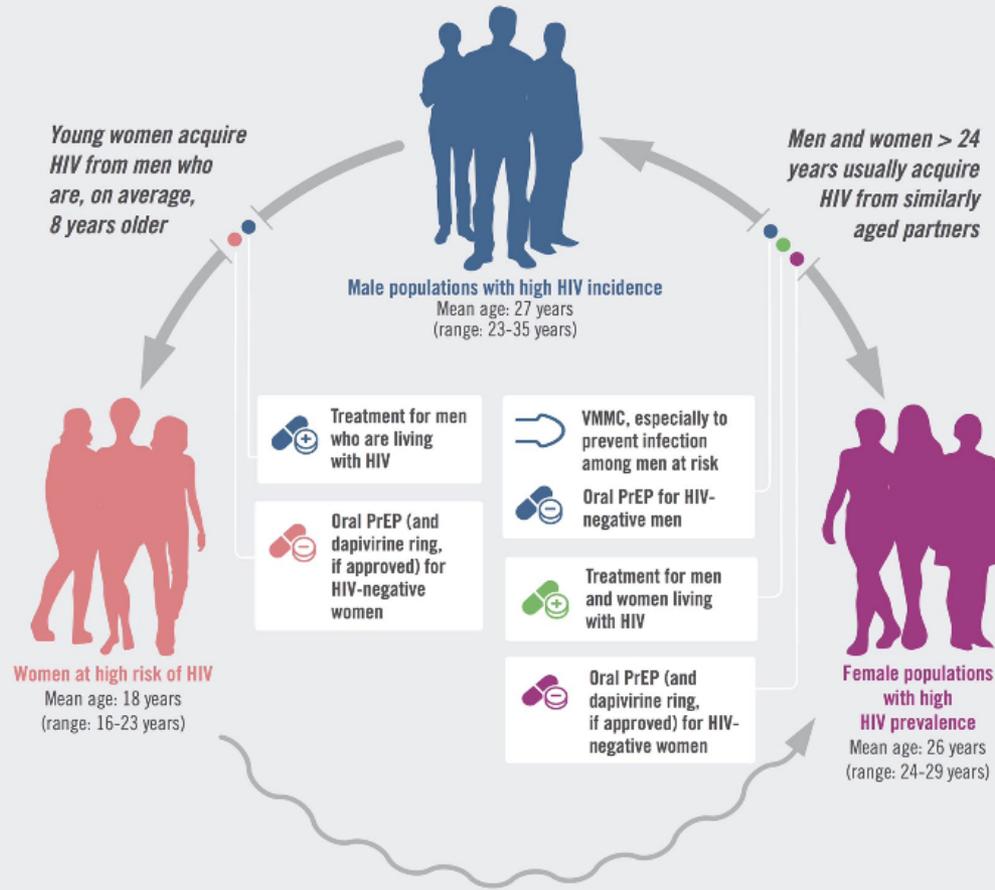
This project is supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through CDC under the terms of cooperative agreement #U2GGH001226. The contents are the responsibility of ICAP and do not necessarily reflect the views of the United States Government.



Prevention and Treatment for <30

Breaking the Cycle of Heterosexual Transmission

Researchers in South Africa used genetic analysis of HIV to understand the cycle of transmission of HIV in one part of the country. Men and women in each of these age groups have distinct prevention needs noted below, in addition to the standard prevention package including female and male condoms and behavior change.



When teen women with HIV reach their mid-20s, if they aren't on effective ART, then they may transmit to partners of the same age—and vice versa

HIV Prevalence and ART Use Among Men in Partnerships with 15-29 yo Women in South Africa

Evans et al, AIDS and Behavior 3/7/2017

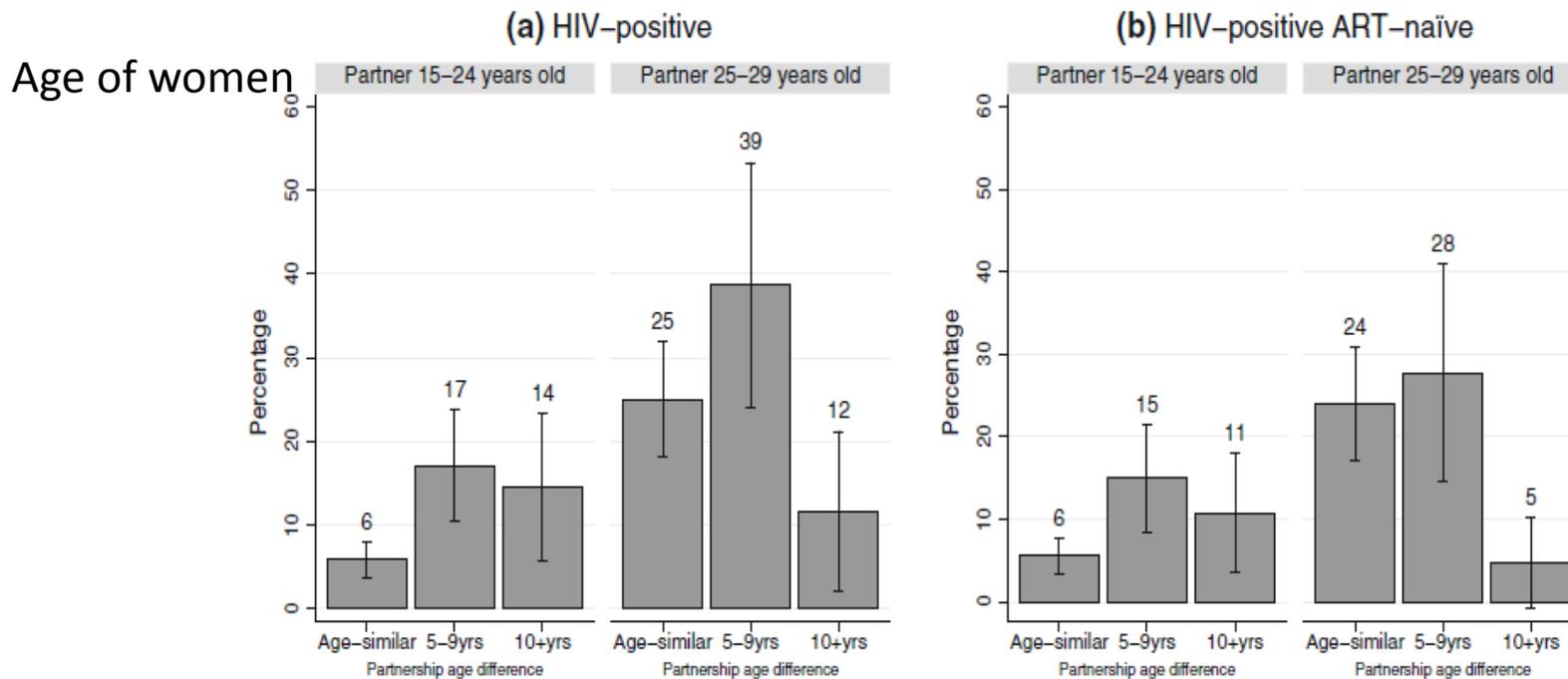
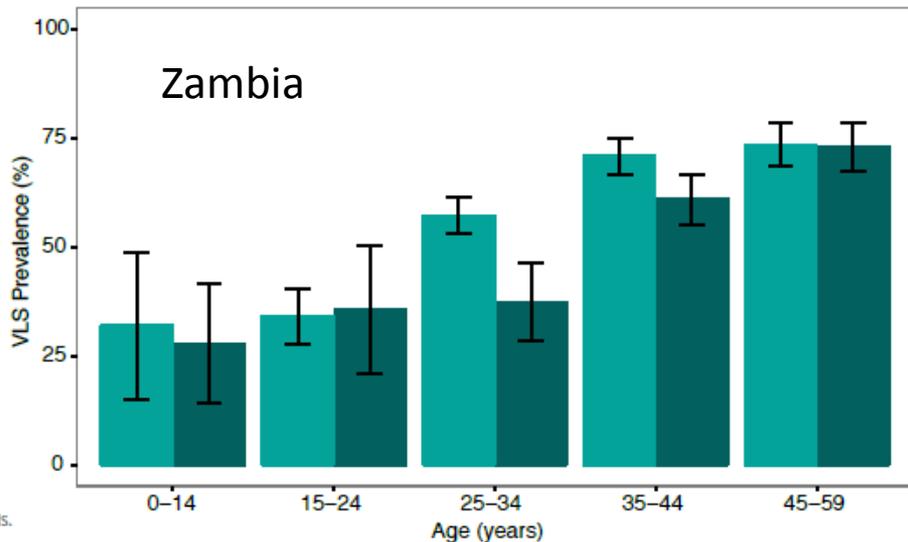
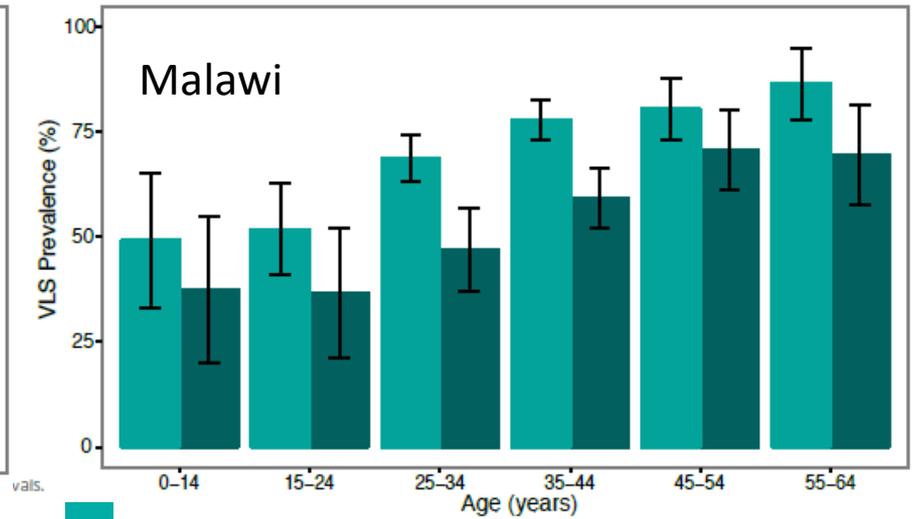
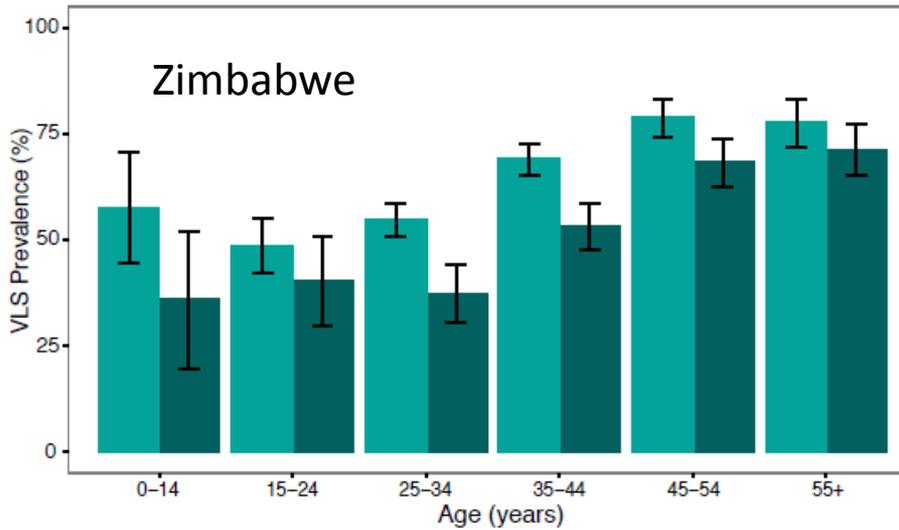


Fig. 2 HIV status and ART use among men by partnership type: age-similar (<5 year age gap), age-disparate with an age-gap of 5-9 years, and age-disparate with an age-gap 10+ years, with the

analyses conducted separately by age of their female partner (15-24 years old or 25-29 years old)

Viral Load Suppression Rates by Age and Sex from PHIA Data



Females
Males

Error bars represent
95% confidence intervals.

Viral suppression rates are below 50% in men under 35, increasing risk of transmission to partners.

Young adult men (23-35)

INFECT

**adolescent girls & young
women (16-23)**

**who then grow up to
infect**

their male peers (24-29)

**AND THE CYCLE
CONTINUES...**



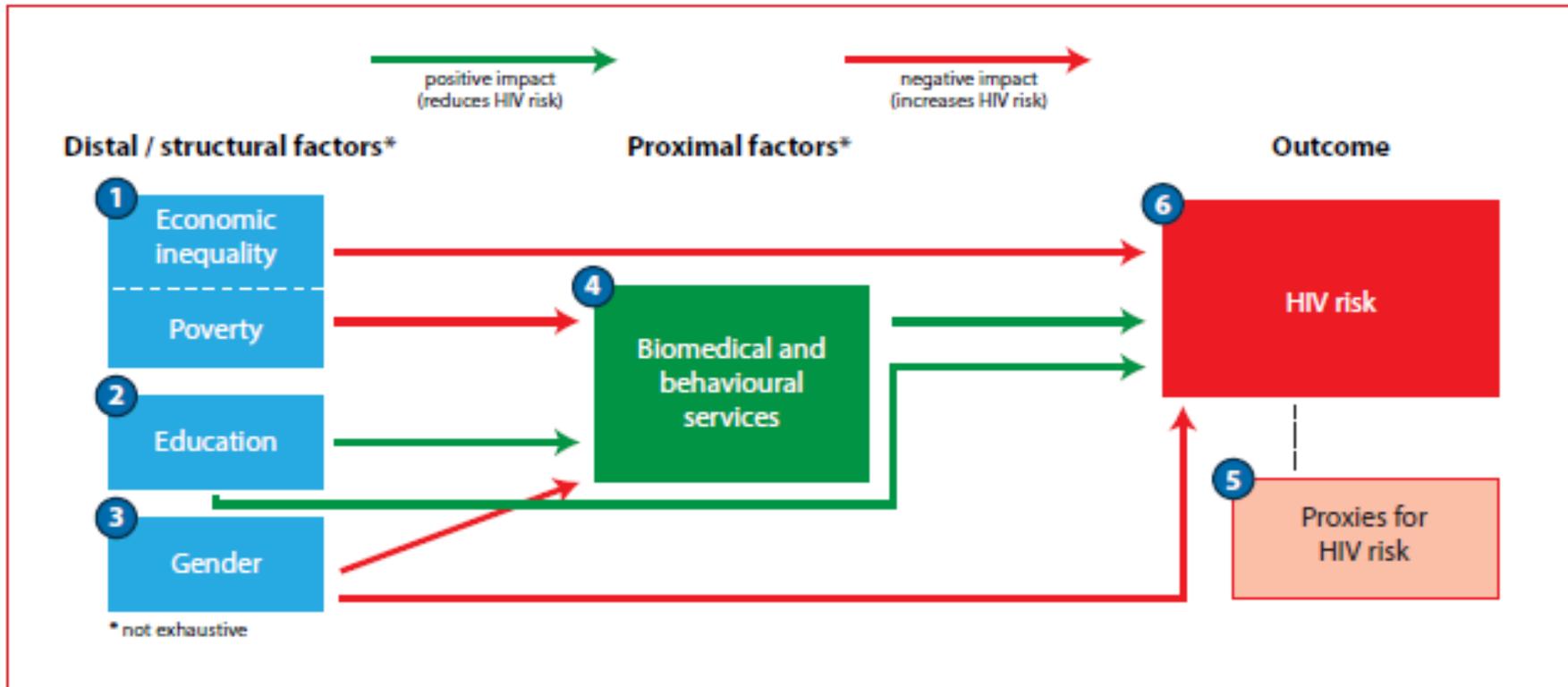
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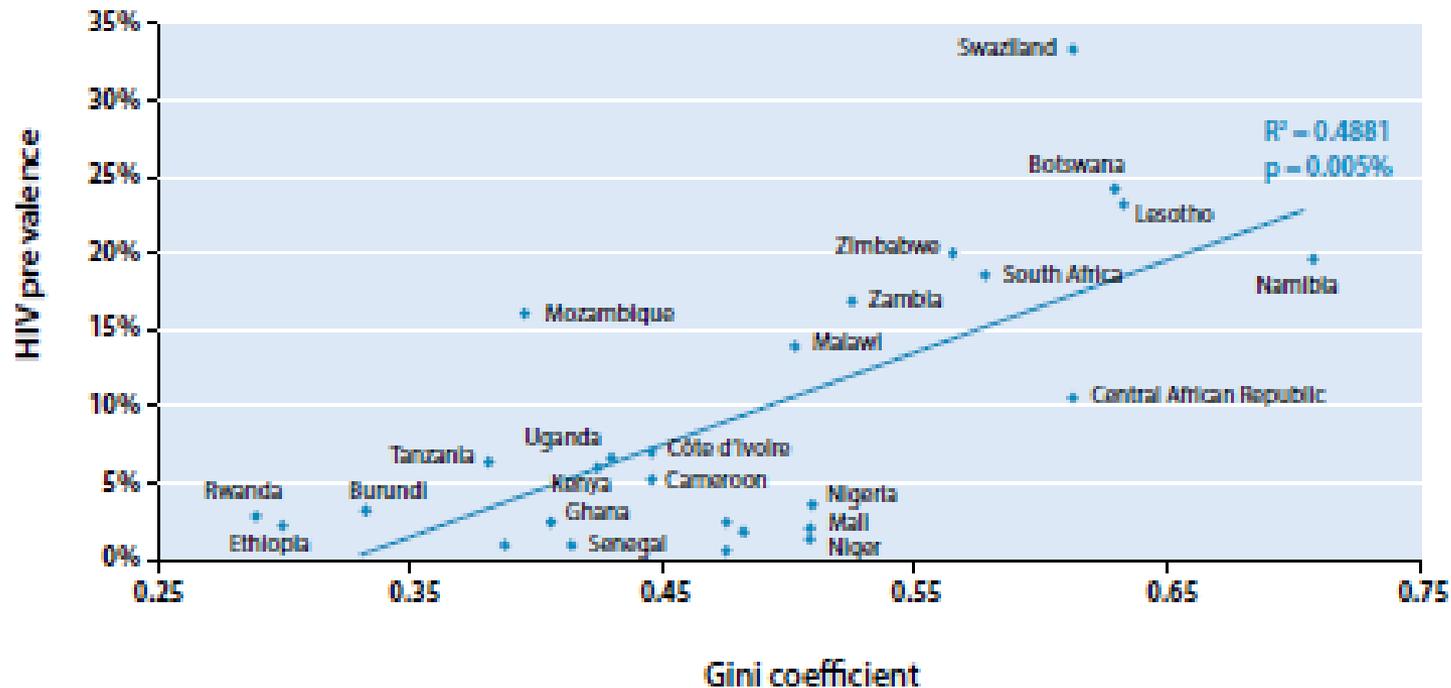
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HIV Risk and Mitigation

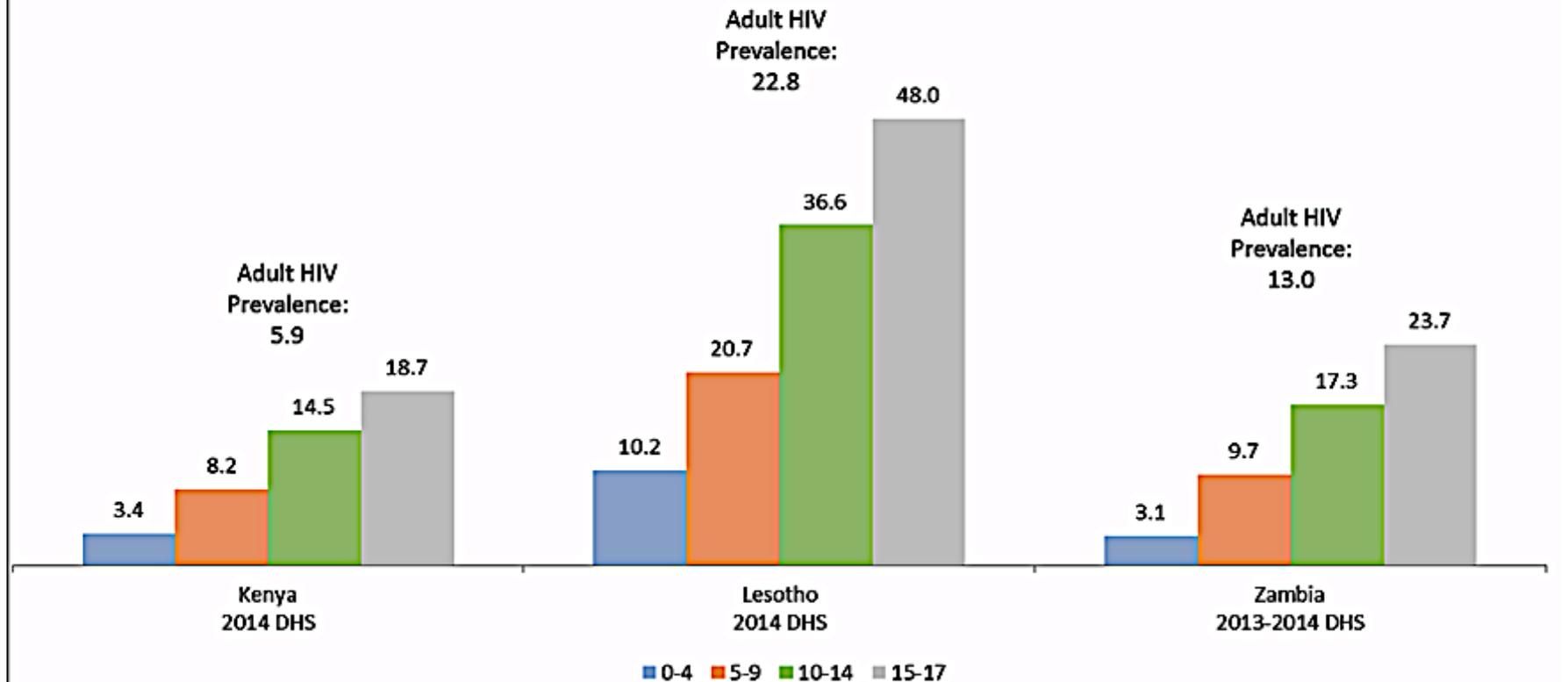


HIV Prevalence and Inequality as Measured by the Gini Co-efficient

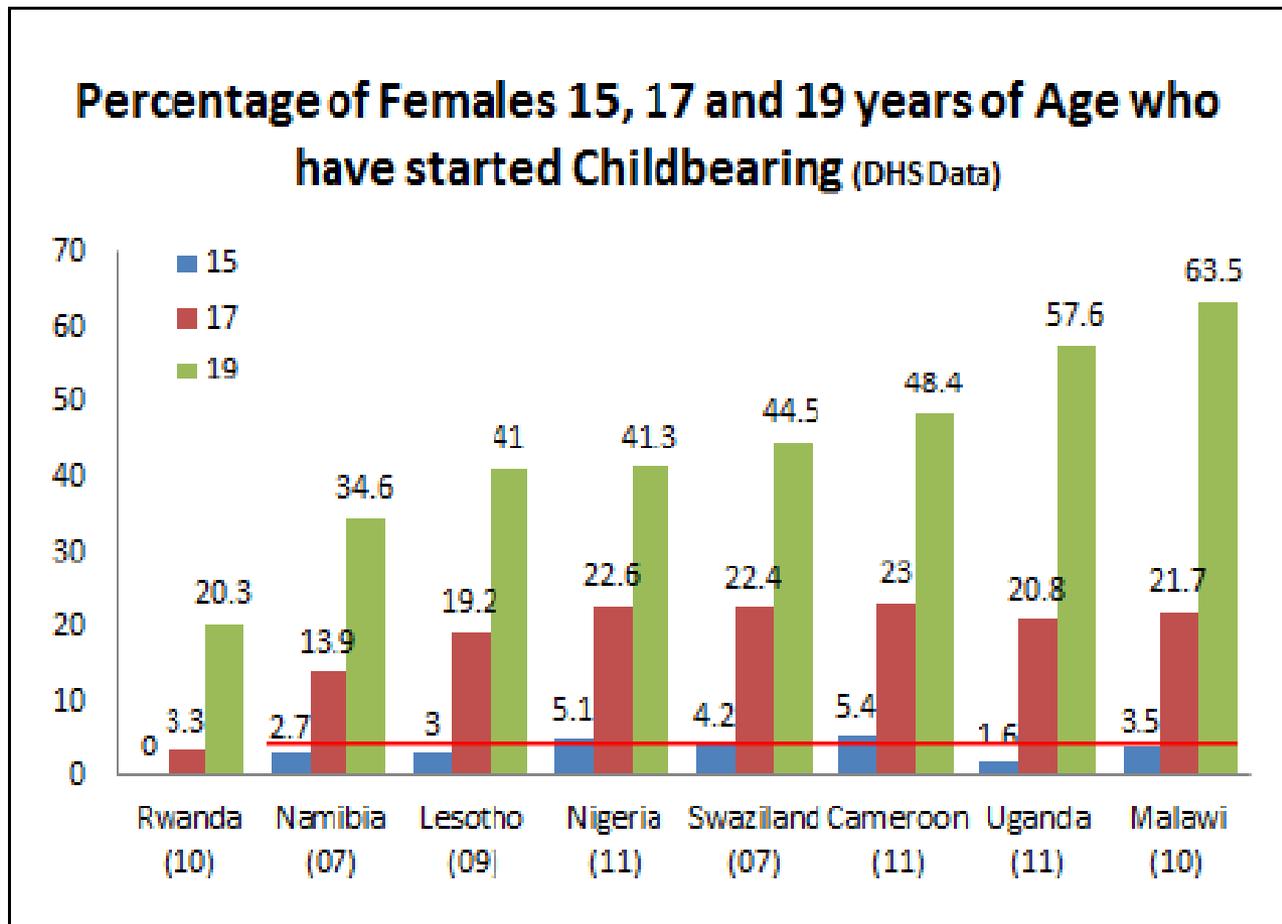


From Piot, Greener, and Russell 2007. See Cash Transfers and HIV Transmission UNDP discussion paper by Lutz and Small, 2014.

Prevalence of orphanhood: Children under 18 who are orphans - mother, father or both dead

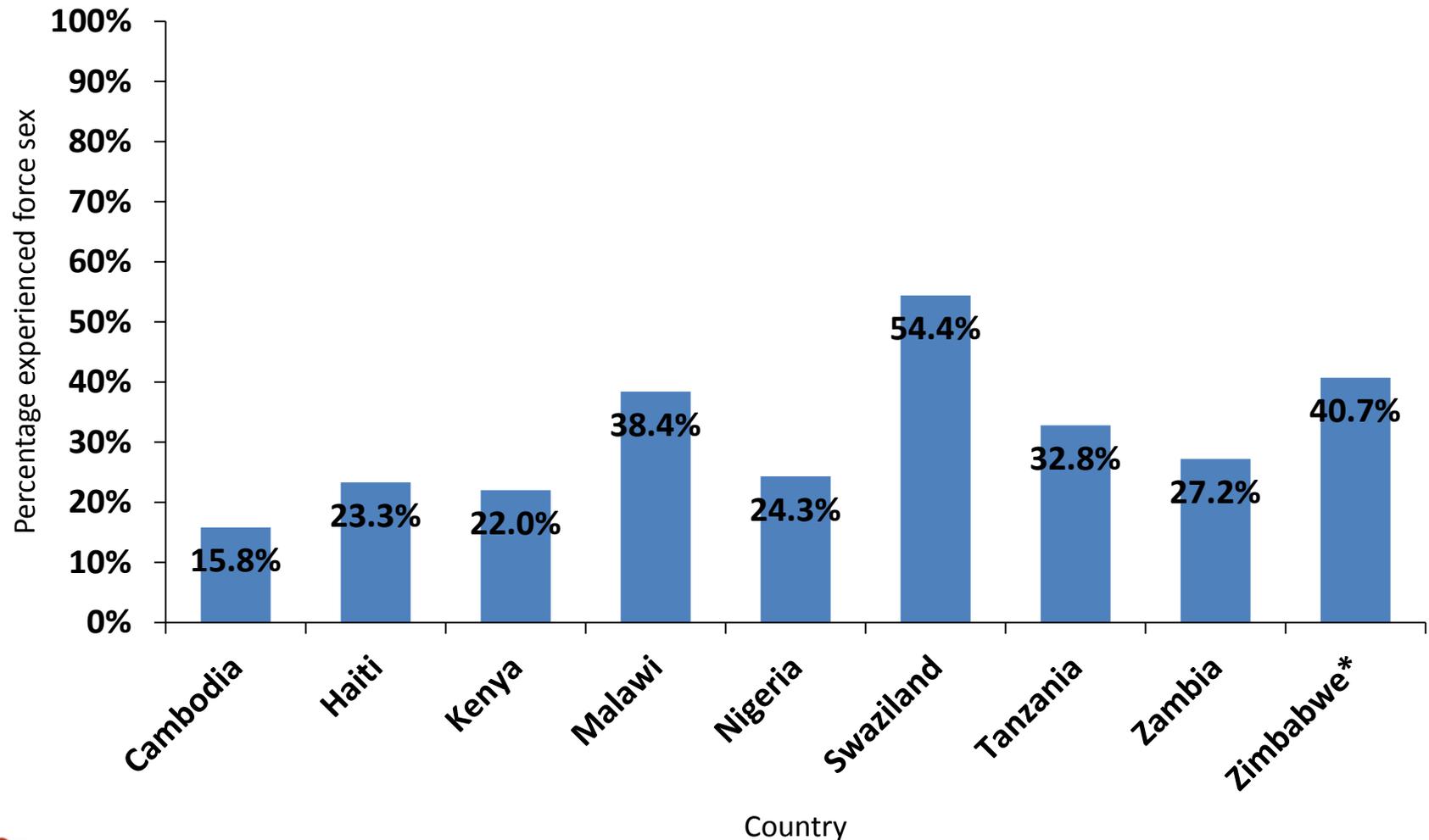


Access to Sexual and Reproductive Health Services Crucial to Empowering Young Women



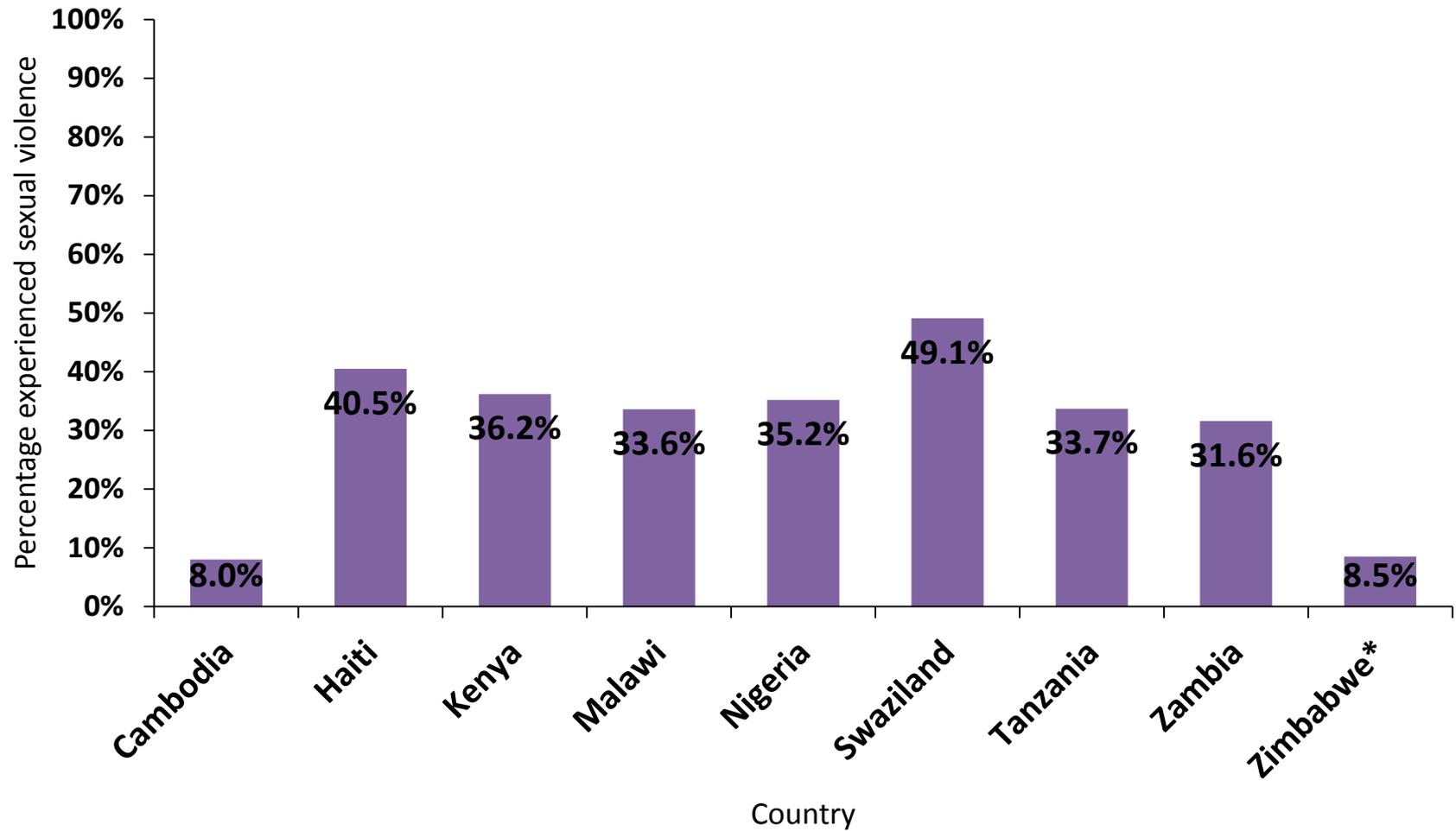
Data from the most recent DHS analyzed by Rick Olson of UNICEF.

Percentage of 13-24 Year Old Female Respondents Who Reported First Sex as Forced/Coerced

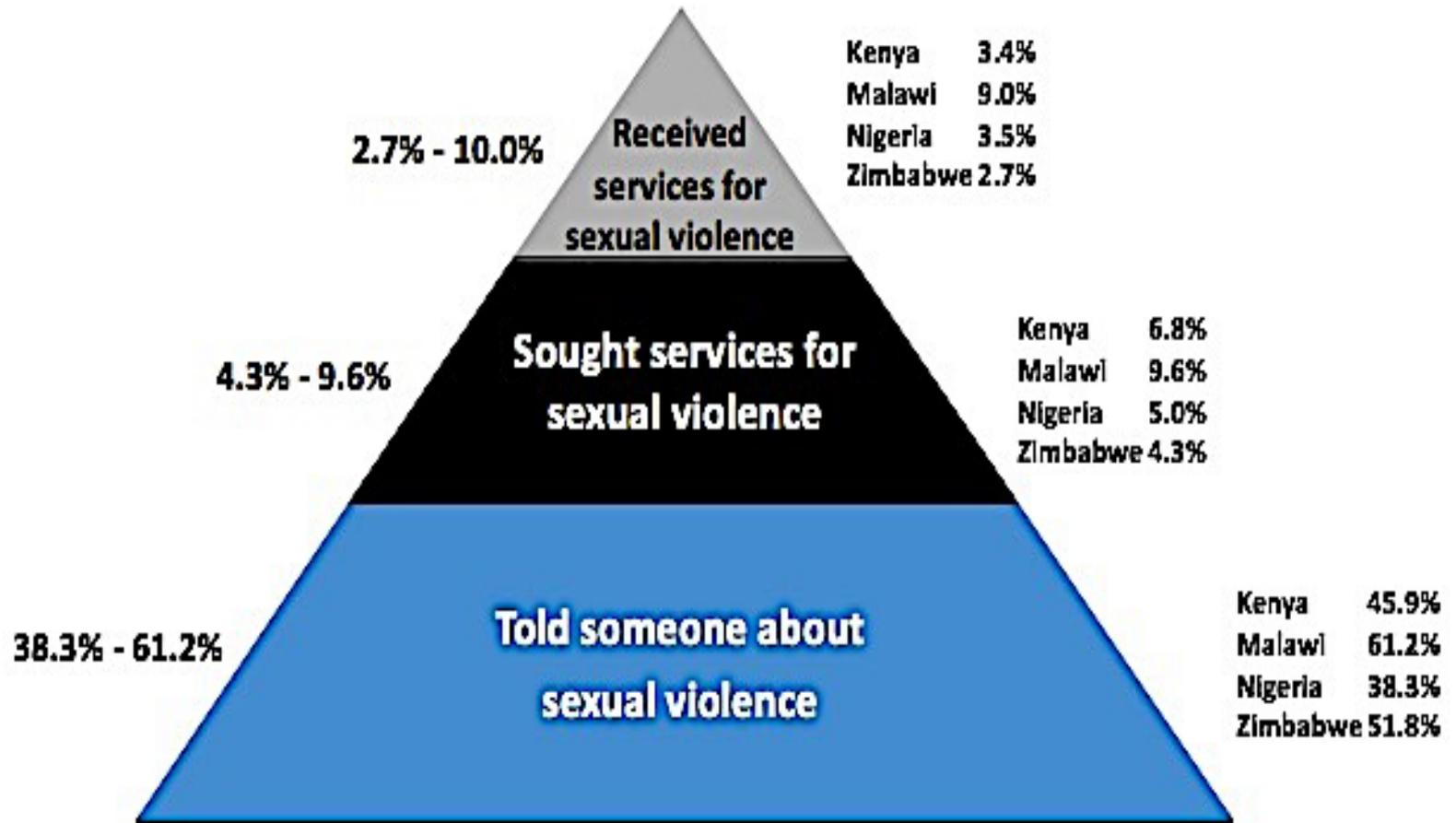


*Data for Zimbabwe only available for 18-24 year old female respondents.

Sexual Violence among 13-24 Year Old Female Respondents Within the Past 12 Months



Disclosure and Service Usage 18-24 Year Old Female Victims of Sexual Violence*, VACS



* Among those who experienced sexual violence prior to age 18



Education reduces risk of HIV acquisition



Study in Botswana compared young women and men completing 9 versus 10 years of education

One additional year of education for adolescents can reduce HIV acquisition before age 32 by one third

- The protective effect of education is **even stronger among young women** – risk of HIV acquisition was cut nearly in half

Source: De Neve et al., The Lancet, 2015



Determined

Resilient

Empowered

AIDS-Free

Mentored

Safe

The Core Package



Community Mobilization
& Norms Change

Mobilize
Communities for
change

School-Based
Interventions

Additive
Funding
VMMC

Reduce Risk
of **Sex
Partners**

Additive
Funding
TX for Men

Parenting/
caregiver
Programs

Empower
Girls & Young
Women
and reduce risk

Strengthen
Families

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

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

Social Asset
Building

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



Our world is home to 1.8 billion young people between the ages of 10 and 24, and the youth population is growing fastest in AFRICA nearly 2% every year.

If adolescents were a country they would be the most populous country.

Within this generation are 600 million adolescent girls with specific needs, challenges and aspirations for the future.