



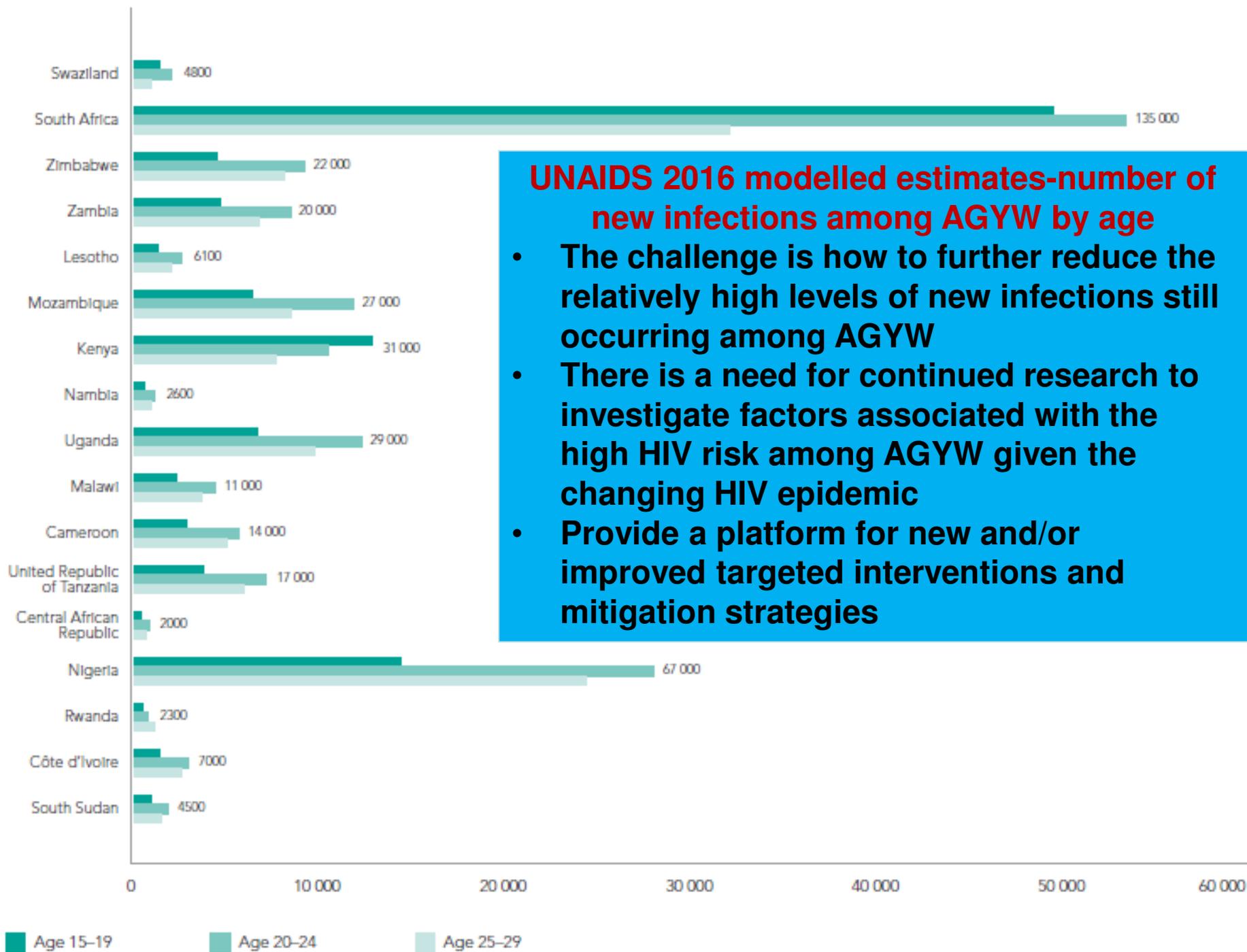
**HSRC**  
Human Sciences  
Research Council

# Determinants of HIV infection among adolescent girls and young women aged 15-24 years in South Africa

**Dr Musa Mabaso**

Epidemiology and Strategic Information Unit, HIV/AIDS, STIs and TB (HAST), Human Sciences Research Council(HSRC), Durban, South Africa

- **Several strides have been made in the fight against HIV in SA including nationwide:**
  - **Scaling up of HIV testing and counselling (HCT)**
  - **Rolling out of Antiretroviral (ARV) treatment**
  - **Increasing mass media, social and behavioural change communication campaigns against HIV**
- **Despite progress against HIV/AIDS, AGYW remain at great risk of new HIV infections**
  - **Great strides in reducing infections including among AGYW**
  - **The infections are less than half the levels that were at the peak of the epidemic 10 years ago**
- **Achievements turned the tide against HIV but not enough to stem the tide**



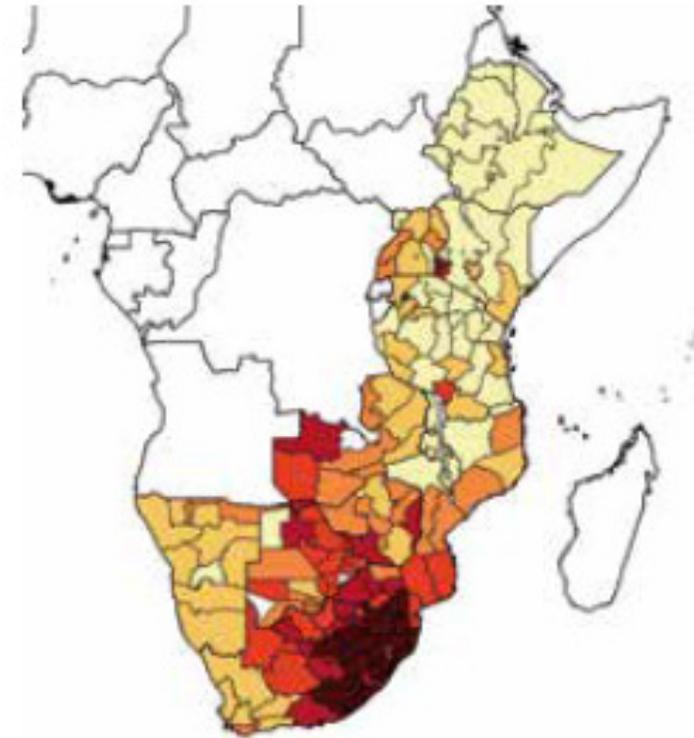
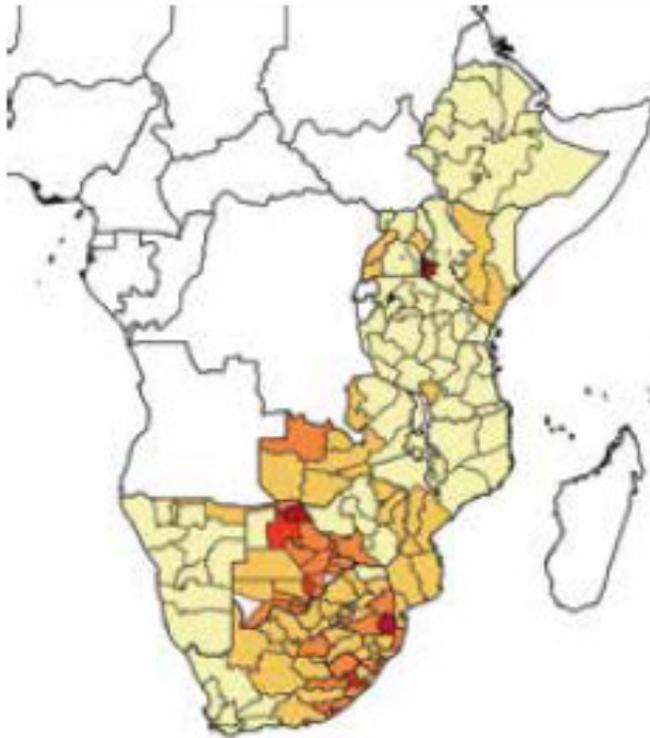
**UNAIDS 2016 modelled estimates-number of new infections among AGYW by age**

- The challenge is how to further reduce the relatively high levels of new infections still occurring among AGYW
- There is a need for continued research to investigate factors associated with the high HIV risk among AGYW given the changing HIV epidemic
- Provide a platform for new and/or improved targeted interventions and mitigation strategies

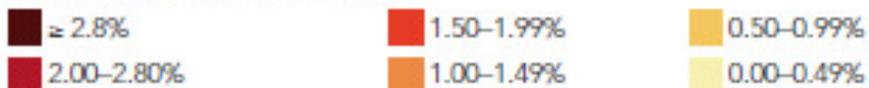
# Incidence (per cent) among AGYW

15-19

20-24



Subnational HIV incidence (%)



Source: UNAIDS 2016 estimates

# What drives vulnerability of AGYW to HIV?

- Biological factors which make women more susceptible to HIV
  - Immature cervix, a greater proportion of genital mucosa, high levels of genital inflammation and vaginal micro-biome
- Several socio-behavioural factors affect young women's vulnerability to HIV
  - Early sexual debut, multiple sexual partnerships, limited condom use, intimate partner violence, intergenerational and transactional sex
  - Low levels of risk perception and knowledge of HIV status
- **Social and gender norms supportive of male superiority and sexual entitlement**
  - **Leading to gender inequality and unequal power dynamics causing females to be unable to negotiate safe sex**

# Study objectives

This analysis investigates socio-demographic and behavioural determinants of HIV infection among AGYW aged 15-24 years in South Africa

## Data

- This analysis is based on the 2012 South African HIV Prevalence, Incidence and Behaviour Survey
  - A nationally representative population-based household survey
- Used detailed age appropriate questionnaires
  - To collect information related to demographics, HIV-related attitudes, practice, behaviours and knowledge
- Dried blood spots (DBS) specimens were also collected for HIV testing

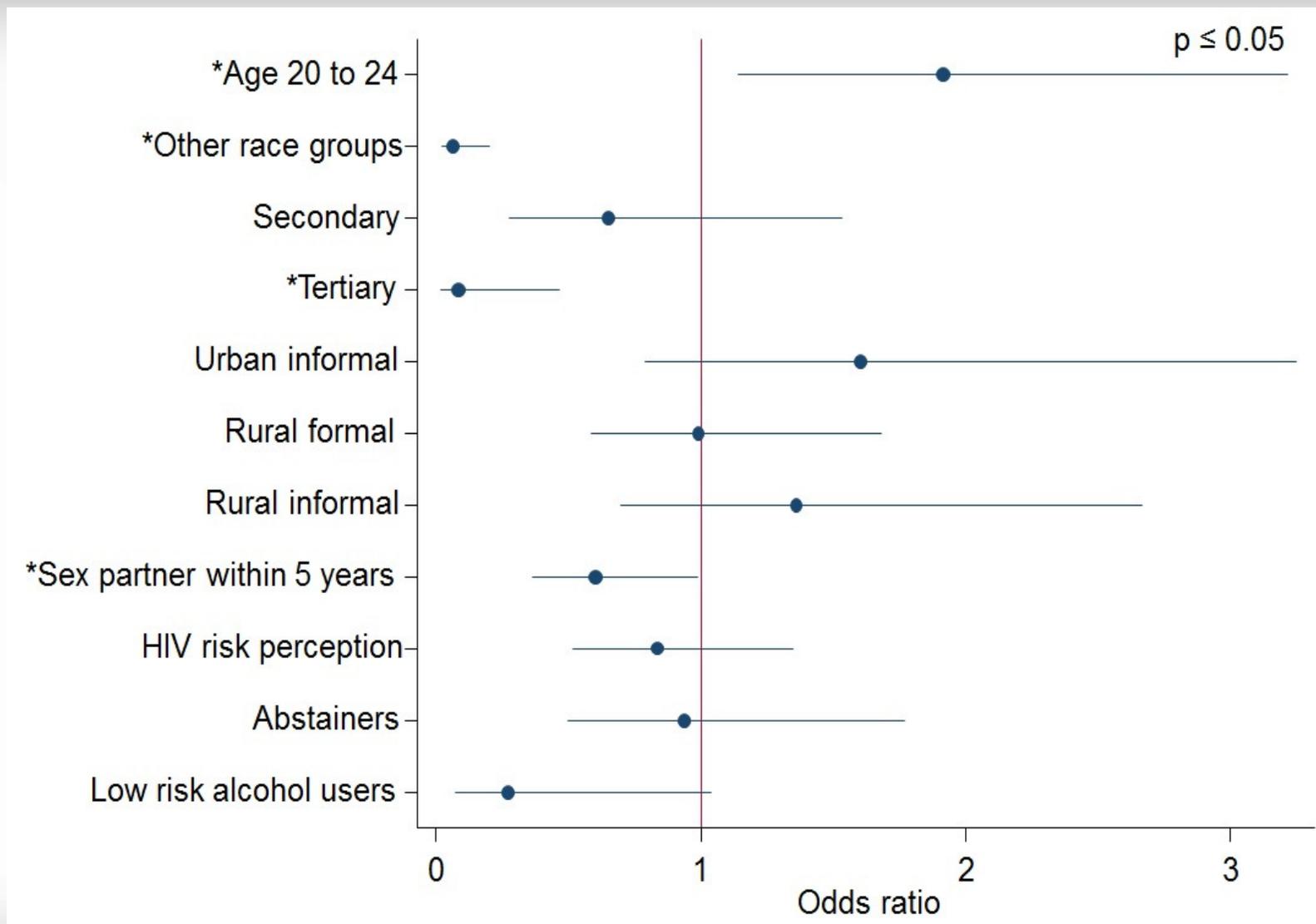
## Measures

- The primary outcome:
  - HIV status (HIV negative=0 and HIV positive=1)
- Explanatory variables:
- Socio-demographic variables
  - Age, race, marital status, education level, employment status, and locality type
- Risk behaviours:
  - Age at sexual debut, age-disparate partnerships, multiple sexual partners in the last 12 months, consistent condom use during sexual contact and alcohol use
- Self perceived HIV risk

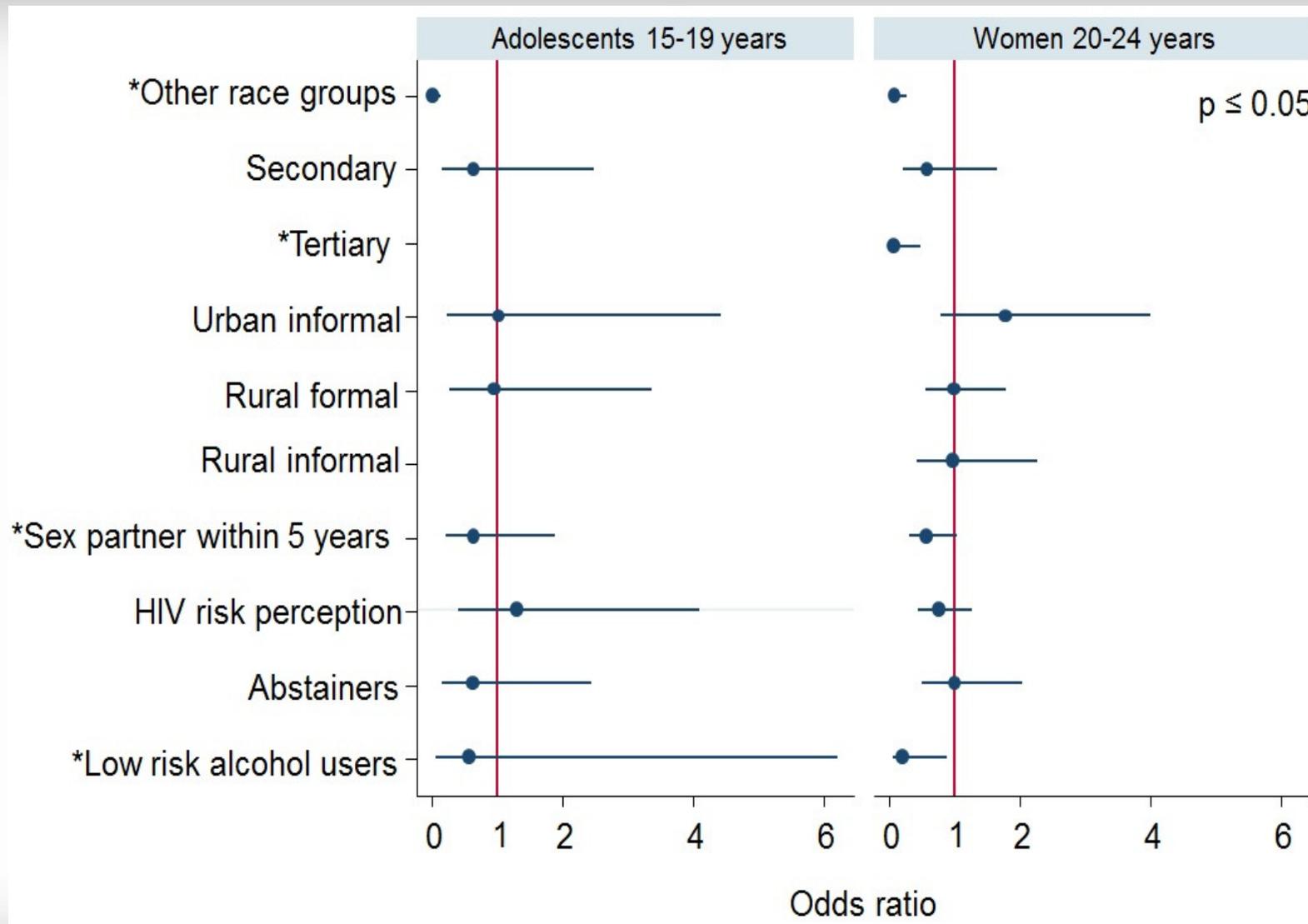
## **Data analysis**

- Bivariate logistic regression analysis was used to assess the relationship between HIV status and selected explanatory variables
- Variables that showed a significant association with HIV prevalence were entered into a multivariate logistic regression analysis
- Only the results of the final model are presented

# Findings: Multivariate logistic regression model



# Findings: Multivariate logistic regression model



- **Education has a protective effect against HIV**
- **Evidence shows that educated women or those with higher level of education are better equipped or empowered to**
  - Adopt safe sexual practices
  - Change their sexual behaviour
- **Having a sexual partner within the same age range was protective of HIV infection**
- **Age differentials reinforce gendered power dynamics impacting on the ability of women to**
  - Decide on the type of sex
  - Engage in protective sex
- **Low risk drinking had a protective effect**
- **Studies have shown that risky drinking is associated with unsafe sex**
  - Affect the ability to use condoms
  - Can lead to sex with multiple partners

- There is a need to promote education as well as equity and access to schooling for young women
- Intensify efforts targeting risk behaviours such as age disparate relationships and risky alcohol consumption
- Address predisposing factors in order to reduce vulnerability of young women
  - Gender power dynamics that leads to gender inequality
- Women's HIV risk is linked to men's risky sexual behaviour
  - Related to masculine norms and promiscuity amongst men
  - Engaging men and boys vital

- **PEPFAR DREAMS:** a program designed to keep young women **Determined, Resilient, Educated, AIDS-free, Mentored, and Safe**
  - **Reducing risky sexual behaviours of male sexual partners**
    - **Characterize male sexual partners of AGYW**
  - **Testing of male partners**
    - **If HIV-positive linking to treatment**
    - **If HIV-negative linking to VMMC services**
  - **Changing community and societal norms- community mobilization**
  - **Strengthen families through parent/caregiver programs, cash transfers, educational subsidies, and financial literacy**
- **Global Fund:** Comprehensive risk reduction package of services
  - **Life skills-based HIV education in and out of schools**
  - **Holistic sexual reproductive health services that include HIV, TB and STIs**
  - **Economic empowerment opportunities through incentivised interventions-bridge to employment**

## Co-authors

Sokhela Z, Mohlabane N, Chibi B,  
Prof K Zuma K, Prof L Simbayi

The data used in this article comes from a study supported by the President's Emergency Plan for AIDS Relief (PEPFAR) through the Centers for Disease Control and Prevention (CDC) under the terms of Cooperative Number 3U2GGH000570. The findings and conclusions in this paper are those of the author(s) and do not necessarily represent the official position of the CDC.

**THANK YOU**