



Youth, HIV, and Social Determinants: Rakai District, 1994-2018

Tom Lutalo and John Santelli

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Youth and Risk for HIV Infection

Age-specific HIV risk is often highest among adolescents & young adults

Biobehavioral factors

- Sexual initiation
- Gender
- Number of sexual partners/ sexual concurrency
- Barrier protection
- Male medical circumcision
- Sexually transmitted infections
- Community HIV prevalence and viral load

Social and structural factors

- Poverty
- Orphanhood
- Power dynamics and women's equality
- Educational and vocational opportunities
- Migration
- Commercial sex work, fishing
- Stigma

Rakai Youth Projects, 1999-present

- Focused on HIV risk, biobehavioral risk, and social risk
- Youth age 15-24 years and partners
- Mix of quantitative and qualitative research
- Social factors
 - Poverty, orphanhood, life opportunities
- Adolescent social transitions
 - Leaving school, migration, initiation of sexual relations, family formation
- Initial studies: HIV incidence and related risks
- SSTAR (Social Structural and Transitions among Adolescent in Rakai)

Initial Findings: Youth and HIV Incidence

- Risk factors for HIV acquisition included:
 - Women > men
 - Multiple partners and concurrency, STI symptoms
 - Alcohol use
 - Leaving school
 - Marriage dissolution (among young adults)
 - Living in a trading village
- Youth are highly mobile (migration and travel) because of work, marriage, school, and other reasons
- Risk factors for HIV incidence and prevalence similar

Santelli 2013, Edelstein 2015, Schuyler 2017

Trends in HIV Acquisition and Risk Factors, 1999-2011

- 86% decline in HIV acquisition among adolescents girls 15-19 years
- Declines in HIV risk factors over time
 - Sexual experience, multiple partners, male circumcision, alcohol use
- School enrollment rose progressively after 1994
- School enrollment associated with rising SES and national education policy: Universal primary education in 1997
- 71% of HIV decline statistically attributable to delayed sexual debut
- 100% of delayed sexual experience attributable to ↑ in school enrollment

Santelli AIDS 2015

New Data: Youth Trends, 1994-2018

HIV Prevalence Among Young Women in Rakai, 1994-2018

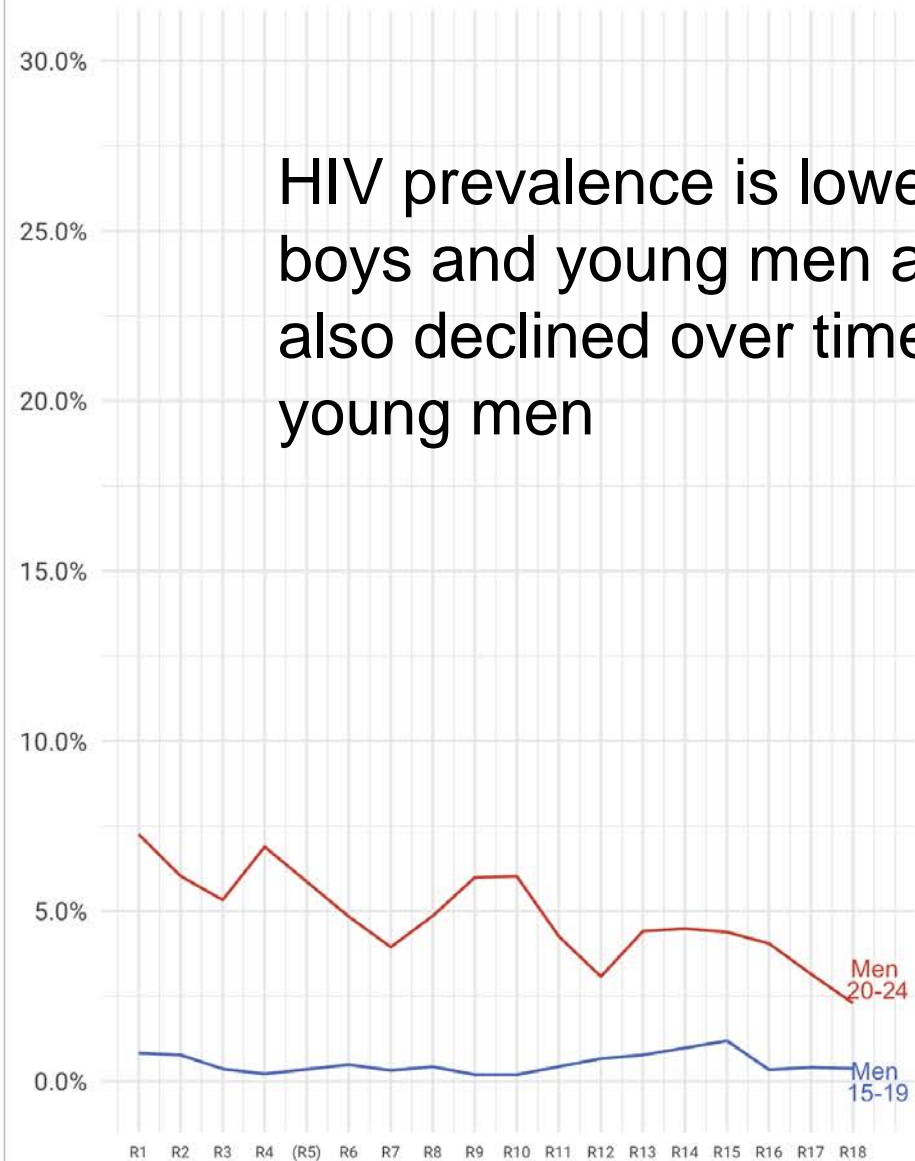
HIV prevalence has
declined markedly
among
young women

HIV Prevalence Among Youth in Rakai, 1994-2018

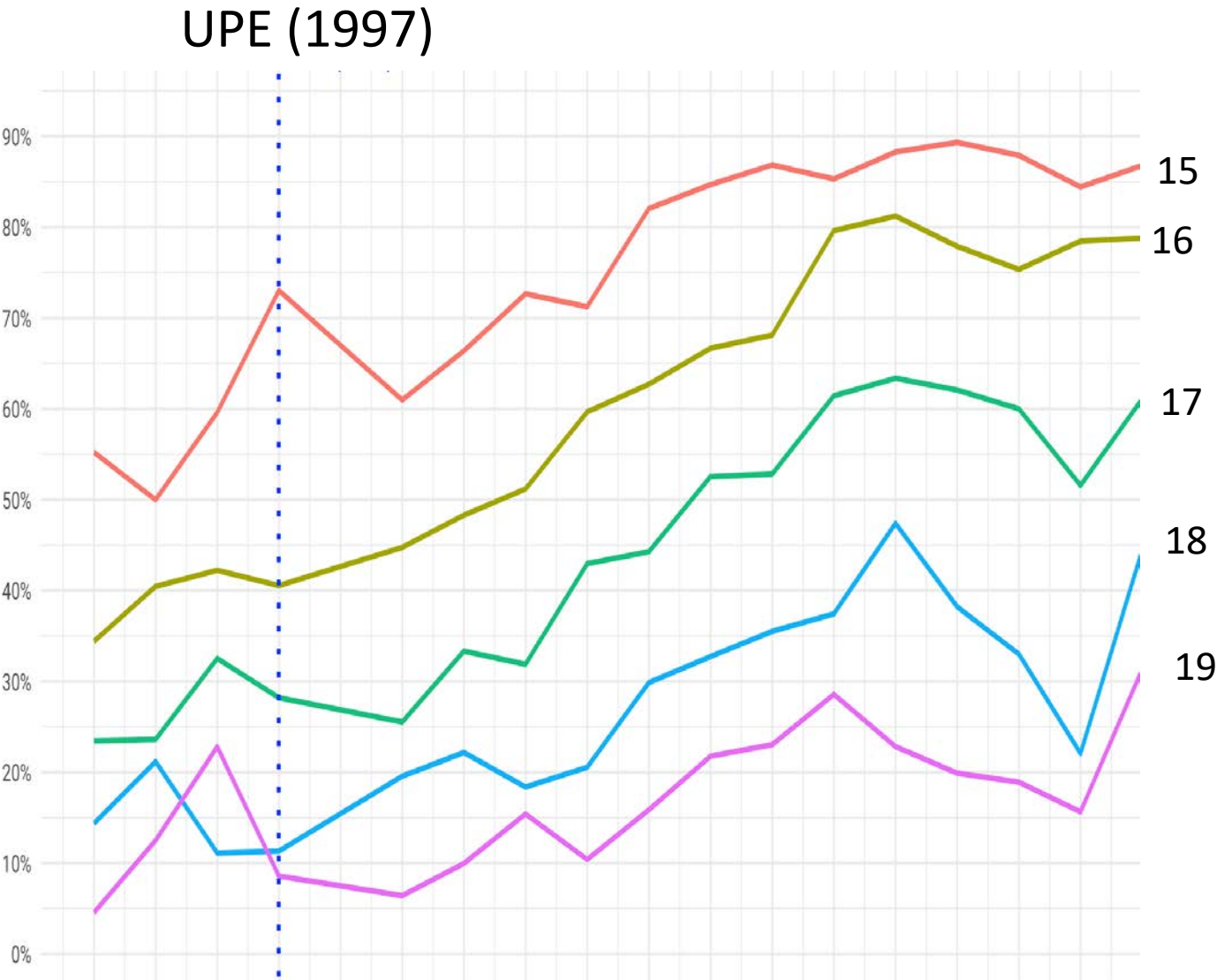
HIV prevalence in women



HIV prevalence in men



School Enrollment by Age, Adolescent Girls, 1994-2018



School enrollment increased among girls at every age between 15 and 19

School and School Leaving (Qualitative)

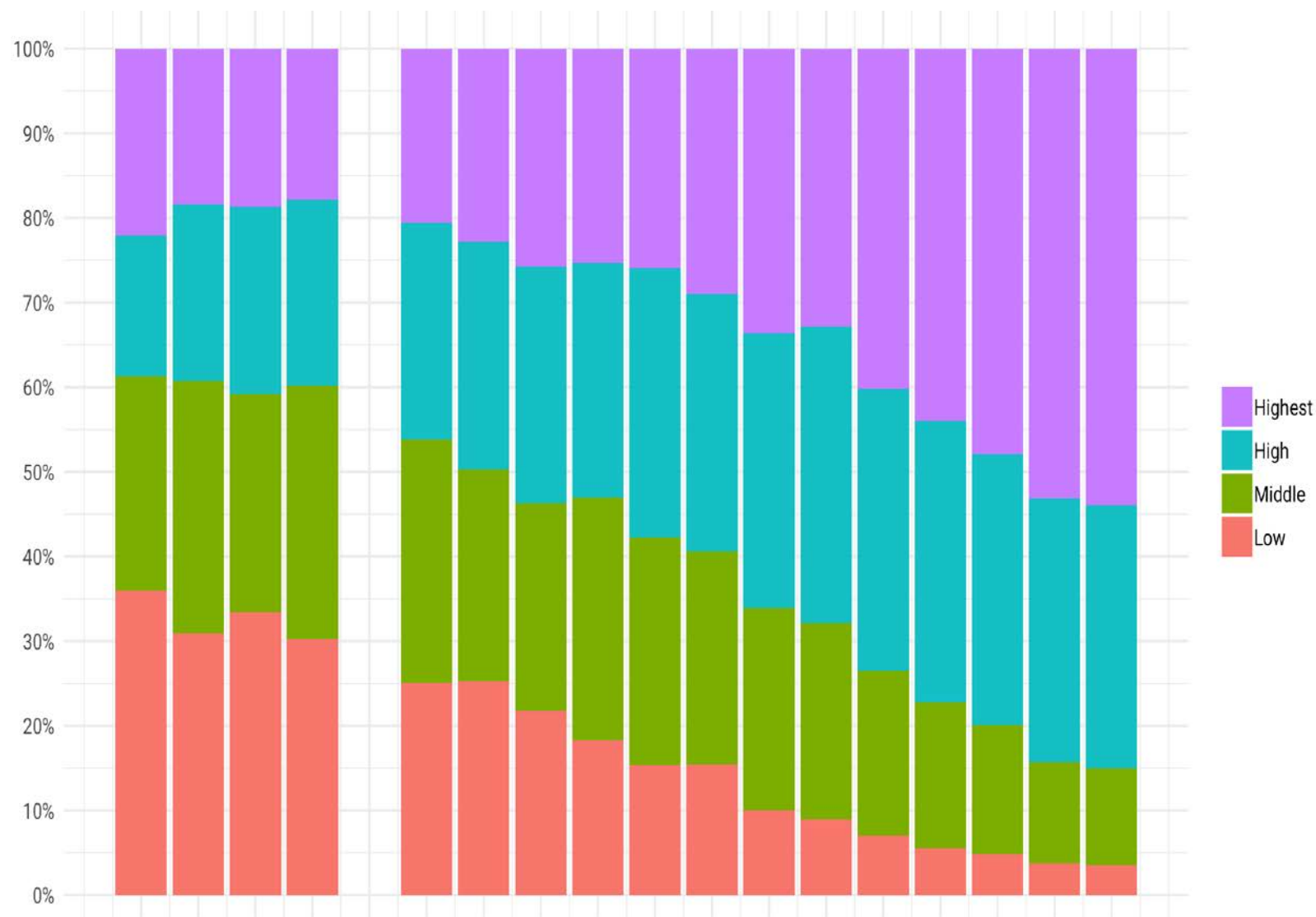
- **Aspirations:**

- Young people, regardless of HIV status, hoped to complete secondary school or go to university.
- The most common work goals were to become a teacher or health worker (nurse).

- **Reality:**

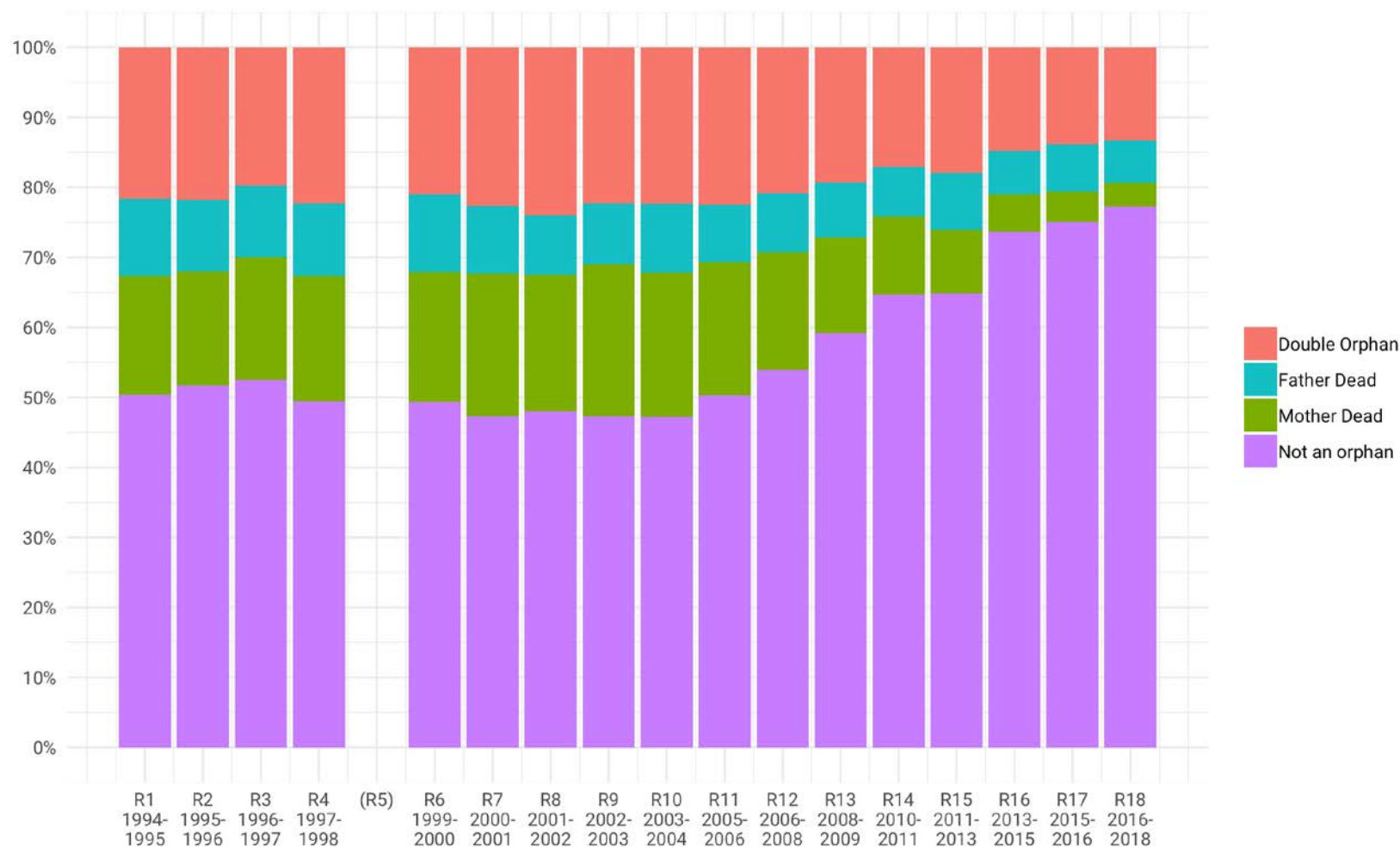
- Young people are often unable to reach their aspirations, primarily due to lack of money, parents mortality (orphanhood), and unplanned pregnancy

Household Socioeconomic Status, Girls 15-19 years, 1994-2018



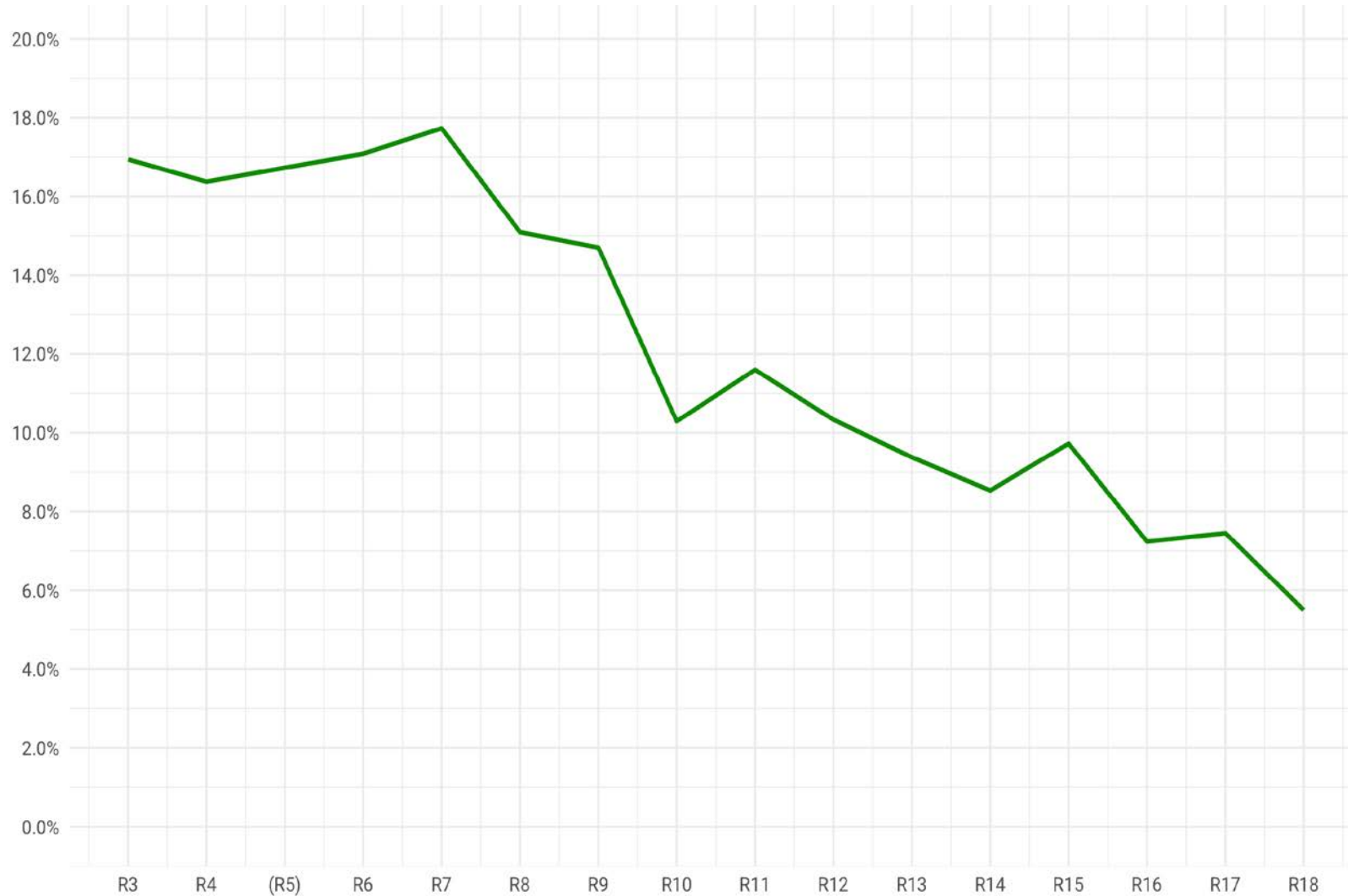
There was a marked improvement in household affluence over time which has contributed to school enrollment

Orphanhood, Boys and Girls 15-19 years, 1994-2018



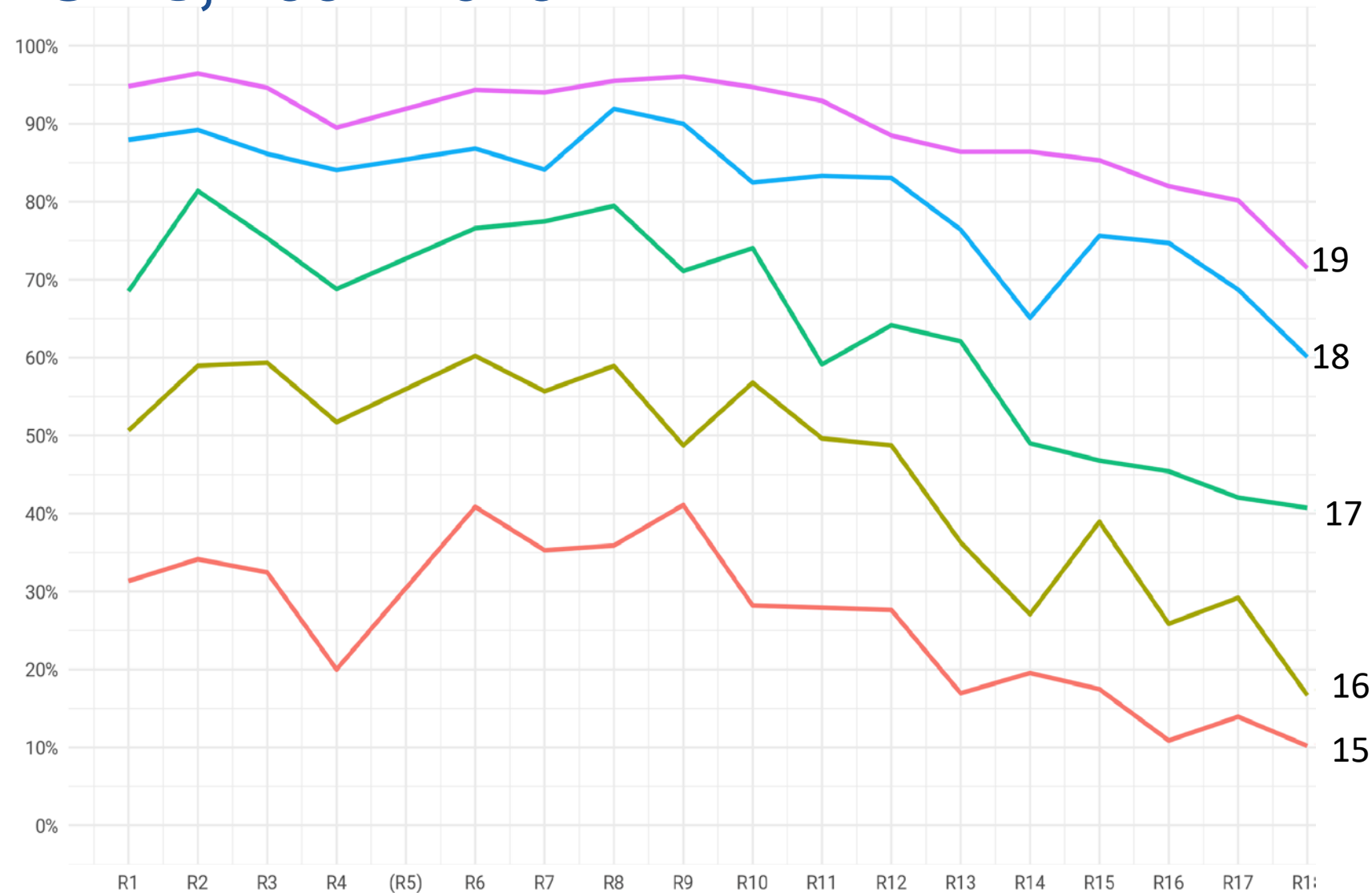
Orphanhood has decreased markedly since the availability of ART in 2004

Adolescent Pregnancy, 15-19 year old Girls, 1997-2018



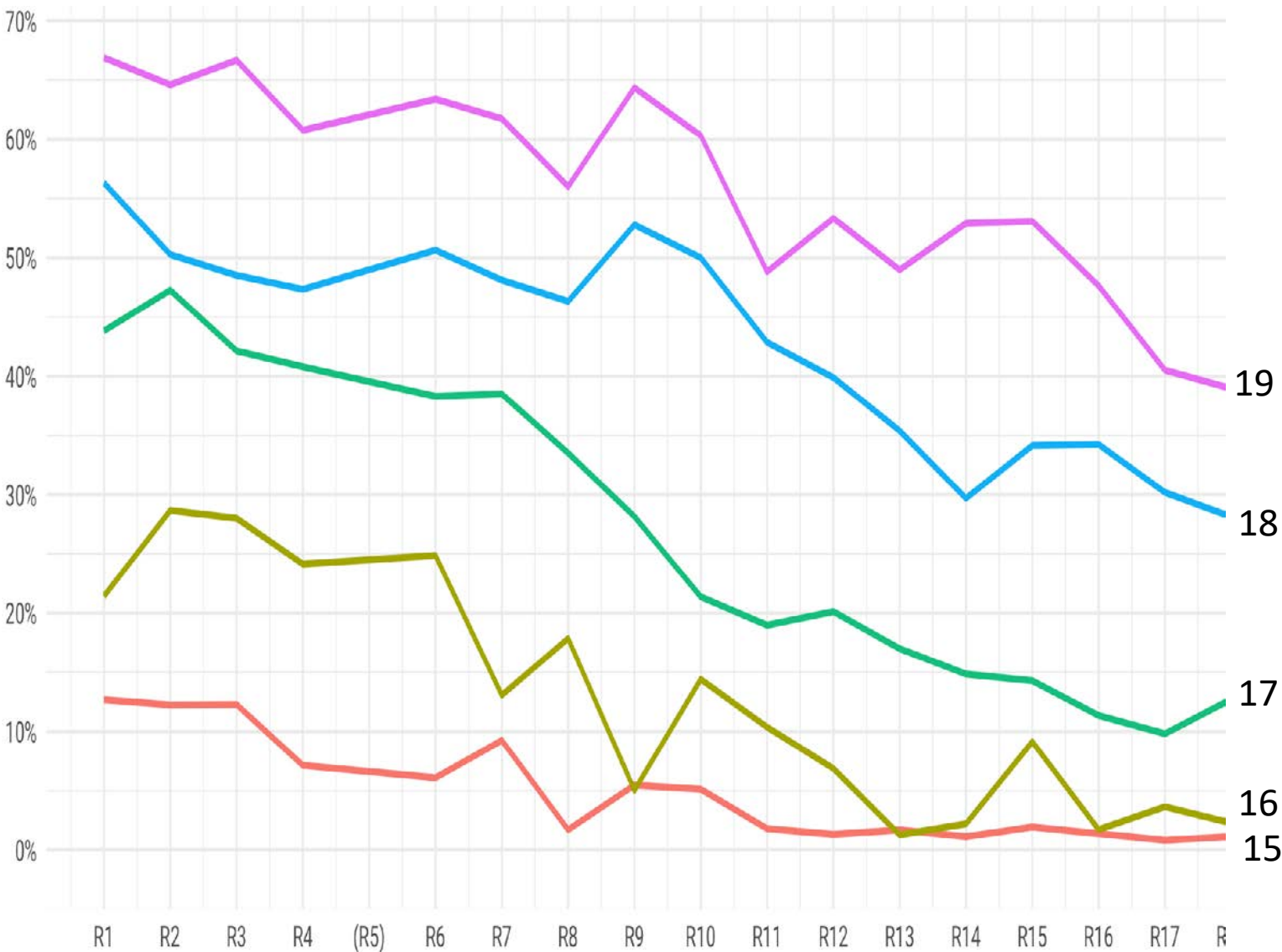
Adolescent pregnancy has declined due to increased contraceptive use and delay in sexual debut

Sexual Experience by Single Year of Age, Adolescent Girls, 1997-2018



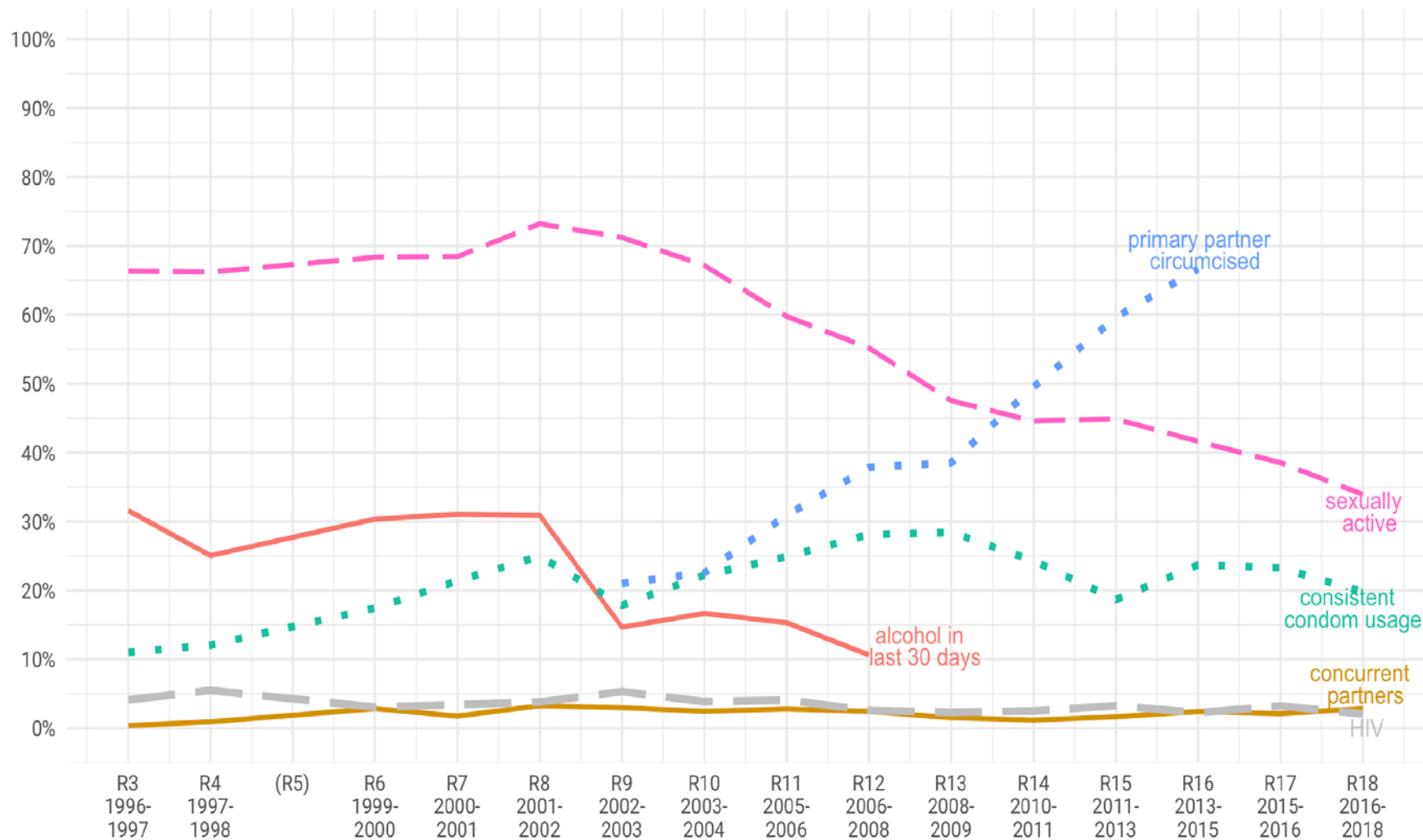
Sexual debut has been delayed at all ages between 15 and 19 years

Current Marriage in Rakai, Girls 15-19, 1994-2018



Child marriage (under age 18) has declined due to access to schooling and delay in sexual debut

HIV Risk Factors, Adolescent Girls, 1996-2018



Delayed sexual debut, and combination prevention have reduced HIV vulnerability of girls

--- Prevalence in all girls 15-19 — Risk factor in sexually active girls 15-19 Protective factor in sexually active girls 15-19

Summary, Rakai, Youth and Social Determinants

- SES and access to education have risen dramatically since 1994
- Rising school enrollment and HIV prevention programs have contributed to:
 - Declining HIV risk behaviors and HIV incidence among adolescents
 - Declining adolescent pregnancy and child marriage

However,

- No single approach is going to work to prevent HIV infections among youth
- A combination of approaches - behavioral, biomedical, community, and policy approaches are going to be needed for youth and adults

