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

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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 is lower in boys and young men and also declined over time for young men.
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 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.
Delayed sexual debut, and combination prevention have reduced HIV vulnerability of girls
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