

Temporal shifts in
HIV-related risk
factors among
cohorts of
adolescent girls and
young women
enrolled in DREAMS
programming:
evidence from

Kenya, Malawi and Zambia

Four decades into the HIV epidemic, adolescent girls and young women (AGYW, aged 15–24 years) remain at high risk for HIV. Globally, over 7000 AGYW seroconvert weekly, and even though they comprise 1/10th of the population, 20% of sub-Saharan Africa's (SSA) seroconversions occur among AGYW. In eastern and southern Africa, which has the world's highest regional prevalence (7.0% (5.9%–7.9%)), the HIV epidemic is magnified by gendered disparities.

- [Temporal shifts in HIV-related risk factors among cohorts of adolescent girls and young women enrolled in DREAMS programming: evidence from Kenya, Malawi and Zambia](#)

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BMJ Open Temporal shifts in HIV-related risk factors among cohorts of adolescent girls and young women enrolled in DREAMS programming: evidence from Kenya, Malawi and Zambia

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ABSTRACT

Objectives To assess temporal shifts in HIV risk factors among adolescent girls (AG, aged 15–19 years) and young women (YW, aged 20–24 years) in Kenya, Malawi and Zambia.

Design Prospective cohorts with two time points (Kenya: 2016/2017, 2018; Malawi: 2017, 2018; Zambia: 2016/2017, 2018).

Setting Community-based programming.

Participants 1247 AG (Kenya: 389; Malawi: 371; Zambia: 487) and 1628 YW (Kenya: 347; Malawi: 883; Zambia: 398).

Intervention Determined, Resilient, Empowered, AIDS-free, Mentored and Safe (DREAMS), a multisectoral approach to reduce AGYW's HIV vulnerability by delivering a package of tailored, multilayered activities and services.

Primary and secondary outcome measures HIV testing, sexually transmitted infection (STI) symptom experience, number of sexual partners, condom use (consistently, at last sex, transactional sex, experience of physical violence (from intimate partners) and sexual violence (from intimate partners and strangers/non-partners)).

Results Changes in HIV-related risk behaviours among DREAMS participants varied by age group and country. Among AG, HIV testing increased (Kenya and Zambia) and sexual violence from partners (in Kenya and Malawi) and non-partners (in Malawi) decreased. Among YW, HIV testing increased and STI experience decreased in Malawi; consistent condom use decreased in Kenya; transactional sex increased in Kenya and Zambia; and physical violence (in Malawi) and sexual violence from partners (in Kenya and Malawi) and non-partners (all three countries) decreased over time.

Conclusions Improvements in HIV testing and reductions in experiences of sexual violence were coupled with variable shifts in HIV-related risk behaviours among DREAMS participants in Kenya, Malawi and Zambia. Additional consideration of AGYW's risk circumstances during key life transitions may be needed to address the risk heterogeneity among AG and YW across different contexts.

Strengths and limitations of this study

- Longitudinal cohorts of adolescent girls and young women in three sub-Saharan countries were followed across two time points, over a time period of 12–16 months.
- Comprehensive quantitative survey captured knowledge, attitudes and HIV-related risk behaviours and exposure to a community-based multisectoral HIV prevention programme.
- Multivariate analyses examined change over time in factors associated with HIV acquisition.
- Due to a lack of a comparison group, our findings could have been confounded by unobserved changes or secular trends in the study sites and/or the ageing of the cohort.

INTRODUCTION

Four decades into the HIV epidemic, adolescent girls and young women (AGYW, aged 15–24 years) remain at high risk for HIV. Globally, over 7000 AGYW seroconvert weekly, and even though they comprise 1/10th of the population, 30% of sub-Saharan Africa's (SSA) seroconversions occur among AGYW.¹ In eastern and southern Africa, which has the world's highest regional prevalence (7.0% (5.9%–7.9%)),² the HIV epidemic is magnified by gendered disparities. AGYW's prevalence and incidence rates in Kenya, Malawi and Zambia are double that (or more) of their male counterparts,^{3–5} and when compared with all AGYW in SSA, all three countries have a prevalence that is equal to or greater than the regional average.⁶ Though AG (aged 15–19 years) and YW (aged 20–24 years) are a priority population, the breadth, severity and context of their HIV risk is not homogeneous, for among females aged

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