

Protective Factors for Adolescent Sexual Risk Behaviours and Experiences Linked to HIV Infection in South Africa: A Three-Wave Longitudinal Analysis of Caregiving, Education, Food Security, and Social Protection

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KEY MESSAGES FOR POLICY AND PRACTICE

- For adolescent girls, multi-component interventions that support transitions back into school, increase the number of days with enough food at home, and promote sustained positive and supervisory parenting could reduce age-disparate sex, transactional sex, and multiple sexual partners by at least 50%, 25%, and 11%, respectively.
- For adolescent boys, promoting sustained supervisory parenting could reduce age-disparate sex, transactional sex, multiple sexual partners and sex on substances by between 27% and 39%.

BACKGROUND

- Rates of new HIV infections among adolescents (especially girls) continue to exceed UNAIDS targets in Eastern and Southern Africa
- Adolescence is a transitional period towards independence: high risk of engagement in sexual behaviours (e.g., condomless sex, transactional sex), increasing the risk of HIV infection
- Adolescents' engagement in sexual risk behaviours is strongly linked to the broader social and economic conditions that they live and grow up in

- Structural interventions (e.g., anti-poverty cash transfers; caregiver support programmes) seek to reduce engagement in these behaviours by altering adolescents' socioeconomic environment

AIM

- To evaluate the longitudinal associations between six time-varying protective factors and five sexual risk behaviours linked to HIV transmission among adolescents
- To inform the design of future structural interventions for HIV prevention in adolescents

METHODS

- Three waves of longitudinal data from a community sample of adolescents aged 10-19 years living with HIV (n=1046) and not living with HIV (n=483) in the Eastern Cape Province, South Africa (*Mzantsi Wakho* study), data collected between 2014 and 2018
- Multivariable random effects within-between logistic regression models
- We evaluated associations between six socioeconomic conditions (number of social grants; positive caregiving; caregiver supervision; adolescent-caregiver communication; education enrolment; and days with enough food at home) and five HIV risk behaviours (condomless sex; multiple sexual partners; age-disparate sex; transactional sex; and sex on substances)

- We calculated prevalence ratios (PR), contrasting adjusted probabilities of HIV risk behaviours at 'No' and 'Yes' for education enrolment, and average and maximum values for the other five protective factors

RESULTS

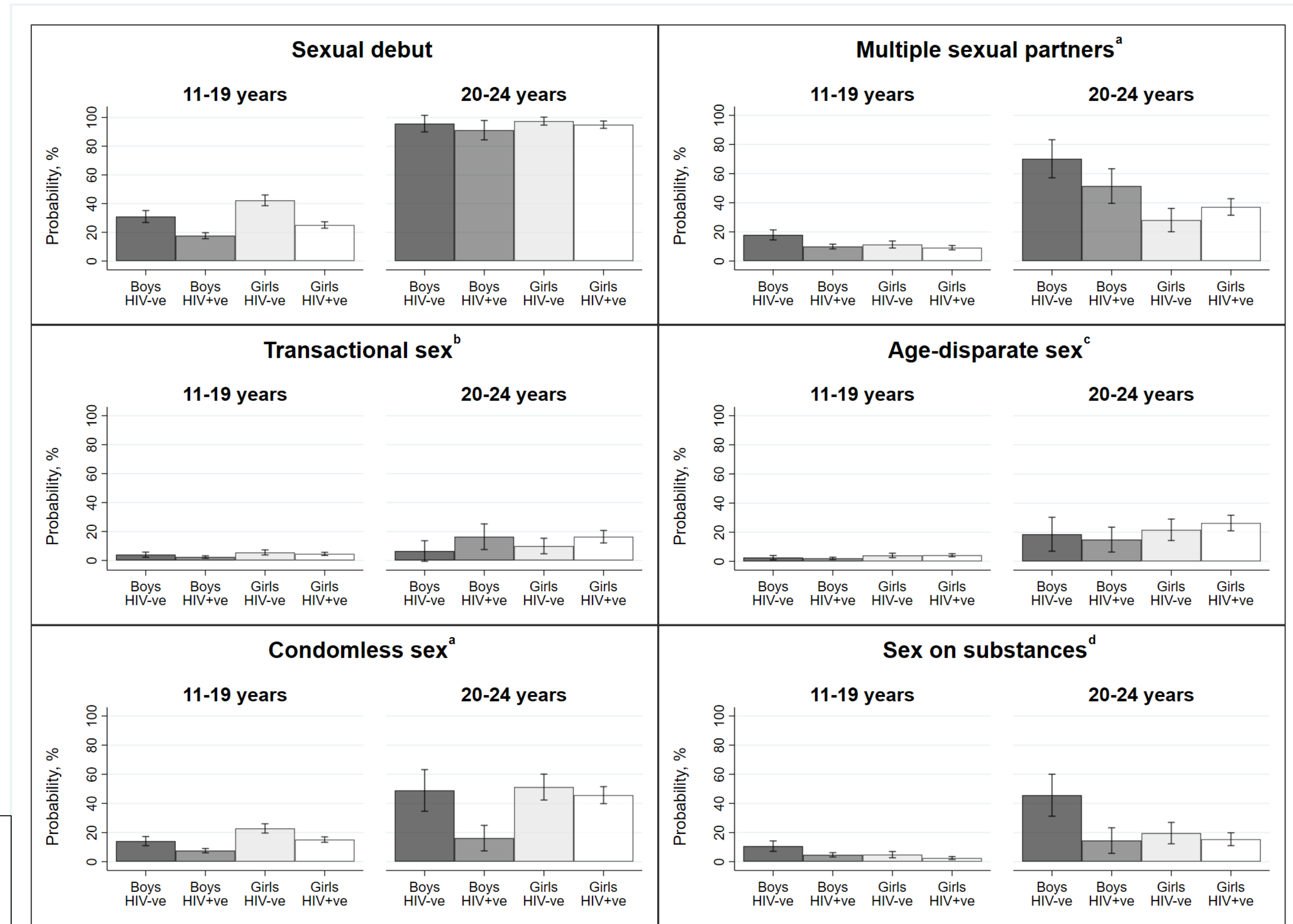
High prevalence of HIV risk behaviours

Rates of condomless sex in this community cohort were much higher than the UNAIDS target of no more than 5% for priority groups, and young men reported high rates of multiple sexual partners.

Adolescents living with HIV

- Girls living with HIV were less likely, on average, to engage in condomless sex, compared to peers not living with HIV
- Boys living with HIV were less likely, on average, to engage in both condomless sex and sex on substances, compared to peers not living with HIV

Figure 1: Risk of sexual debut and five HIV risk behaviours by sex, age, and HIV status over three waves of data collection. N=1563, Observations=4402.



Reductions in HIV risk behaviours among girls and young women

- Increased *caregiver supervision* and *positive caregiving* is likely to reduce girls' engagement in age-disparate and transactional sex
- School enrolment* is likely to lower the frequency of age-disparate sex for girls, possibly by increasing their negotiating power
- Increased *access to food at home* is likely to reduce girls' number of sexual partners and their engagement in transactional sex, possibly by reducing girls' economic dependence on men

Reductions in HIV risk behaviours among boys and young men

- Increased *positive caregiving* is likely to reduce boys' engagement in condomless sex and transactional sex
- Increased *caregiver supervision* is likely to reduce boys' multiple sexual partnerships, their engagement in age-disparate and transactional sex, and sex on substances, possibly by acting as a 'protective shield' and promoting the internalisation of healthy norms
- Increased *access to food at home* is likely to reduce boys' engagement in transactional sex

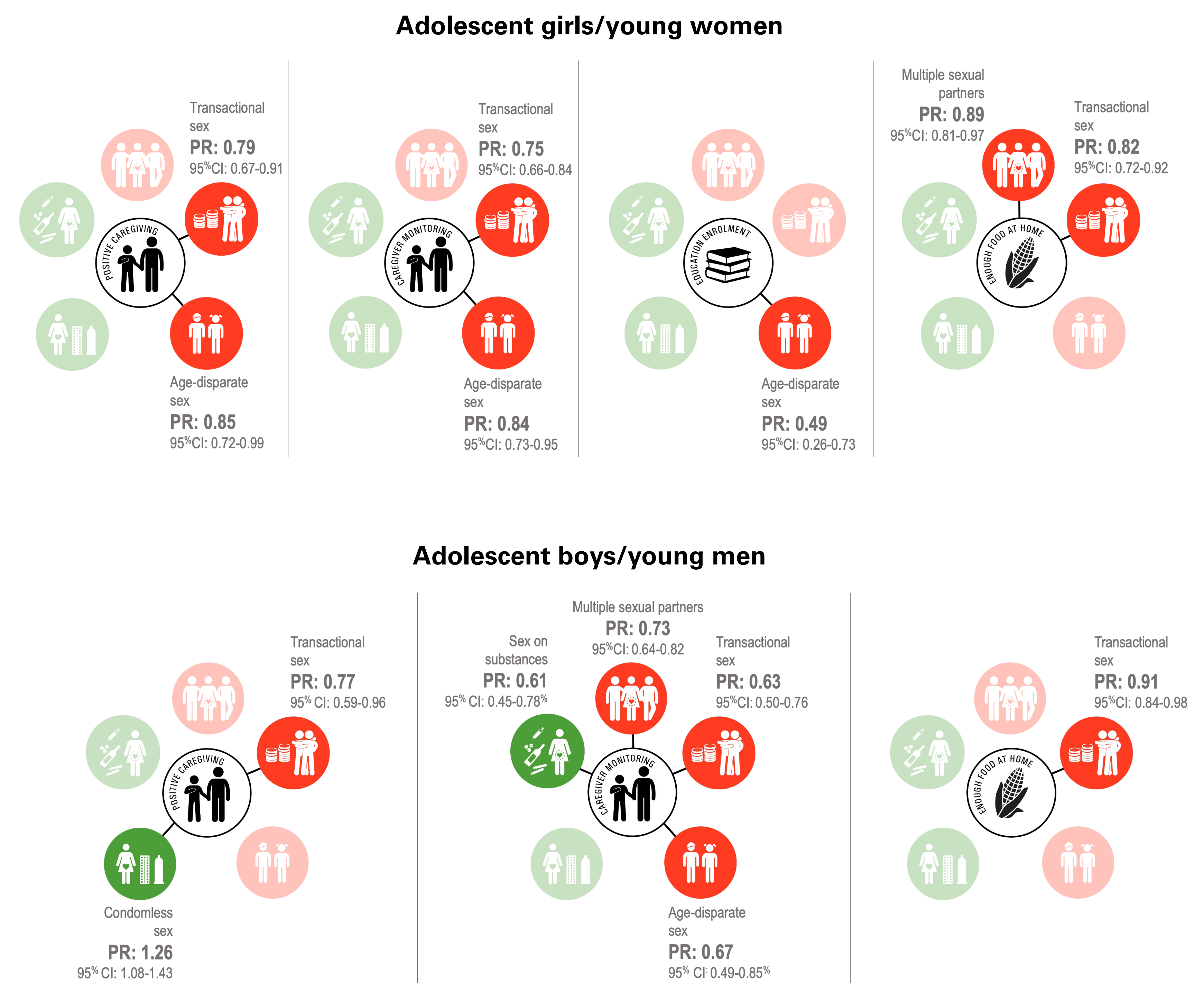


Figure 2: Reductions in HIV risk behaviours
Prevalence ratios for a reduction in HIV risk behaviour at the maximum value of continuous socioeconomic factors, or in the presence of education enrolment (compared to the average value of continuous socioeconomic factors or the absence of education enrolment)

CONCLUSIONS

- Parenting, education enrolment, and food security significantly influence HIV risk behaviours among adolescents in South Africa's Eastern Cape
- Effective structural interventions to improve these socioeconomic factors are likely to translate into crucial reductions in HIV risk behaviours
- Among adolescent girls, multi-component interventions that promote **caregiver monitoring**, **school enrolment** and **food security** are likely to have the greatest impact
- Among adolescent boys & young men, more focused interventions that promote sustained **caregiver monitoring** are recommended