

What is the impact of DREAMS on HSV-2 acquisition among AGYW in rural KwaZulu-Natal, South Africa?

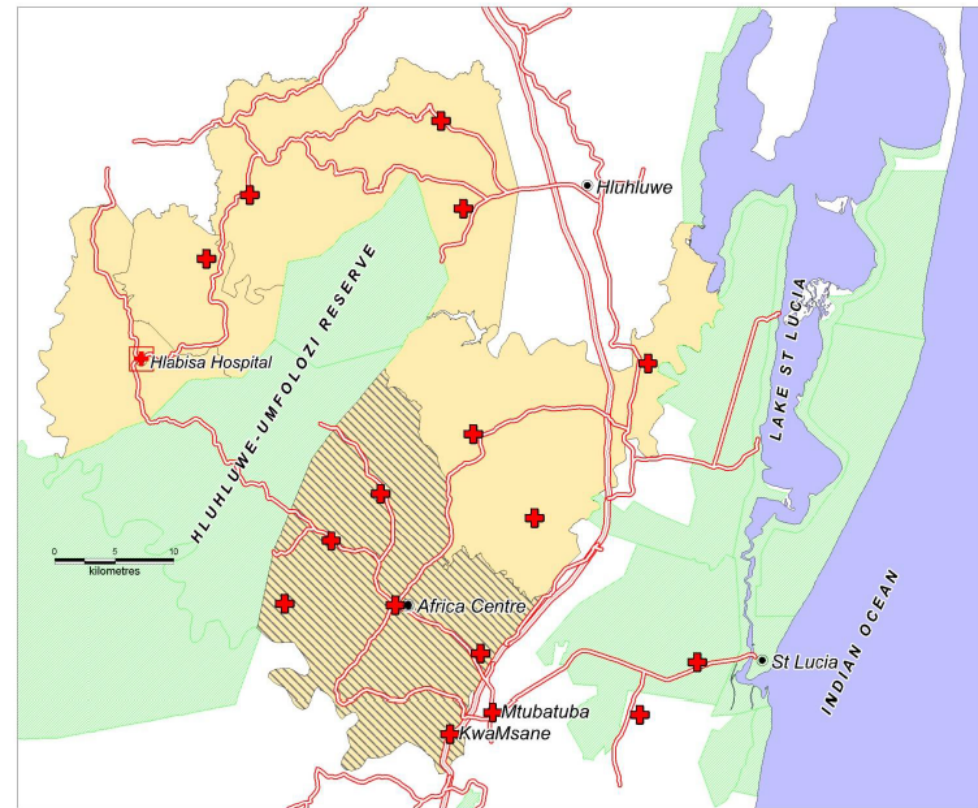
Nondumiso Mthiyane, Natsayi Chimbindi, Kathy Baisley, Janet Seeley, Jaco Dreyer, Thembelihle Zuma, Annabelle Gourlay, Nuala McGrath, Theresa Smit, Isolde Birdthistle, Sian Floyd, Guy Harling, Maryam Shahmanesh

AIDS 2020

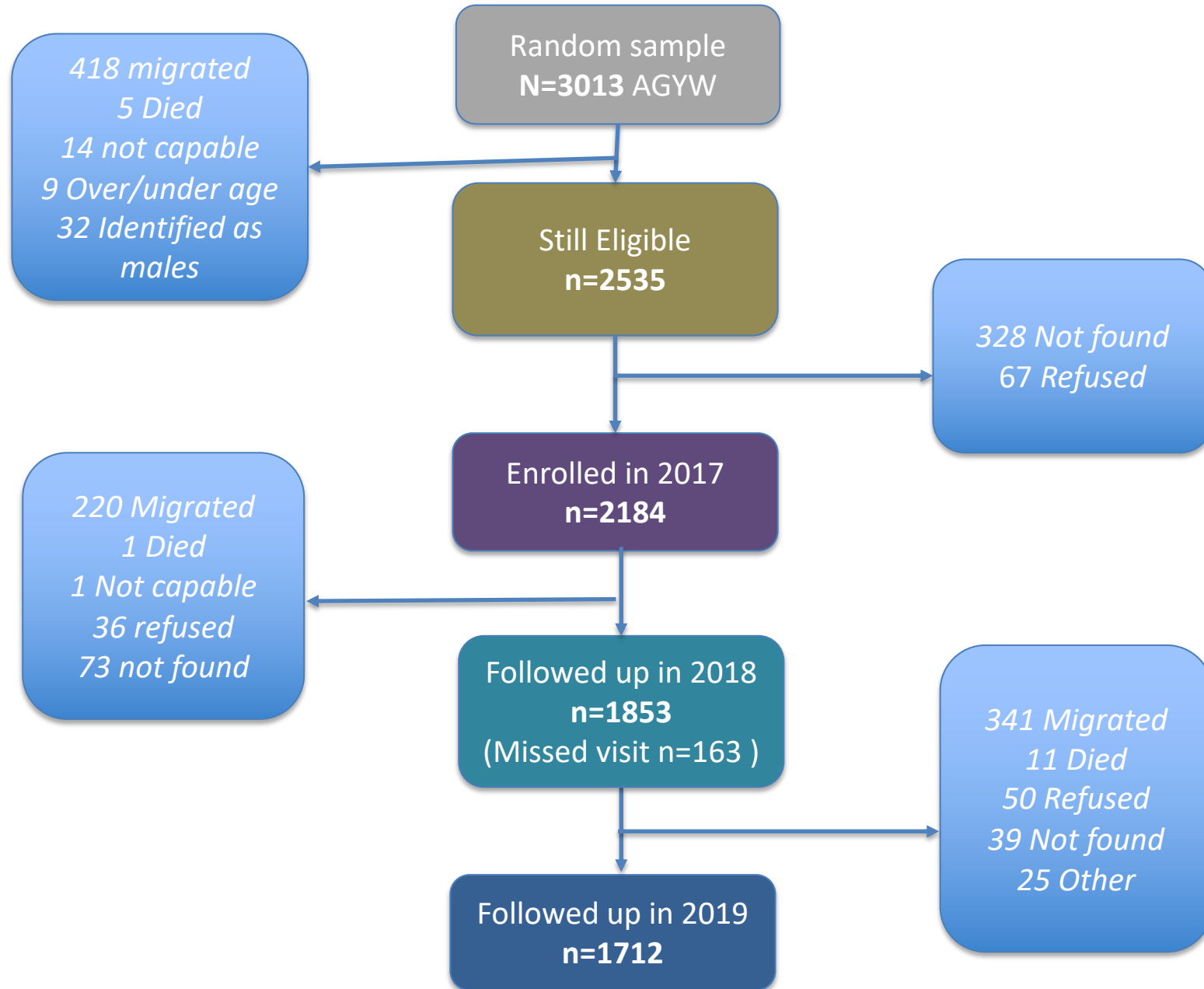
Background

- In South Africa, adolescent girls and young women (AGYW) are at high risk of acquiring STIs and HIV
- Herpes Simplex Virus type-2 (HSV-2) is a marker of sexual risk and increases HIV acquisition risk
- DREAMS combination biological, behavioural, and structural interventions aimed to reduce HIV incidence in AGYW
- We evaluate the impact of the DREAMS partnership on HSV-2 infection in AGYW living in a rural area of South Africa

Setting: AHRI Health and Demographic surveillance system



AGYW Cohort aged 13-22 years



Methods - Data collection

- Face-to-face interview and self-filled questionnaire
 - Socio-demographics
 - General health
 - Awareness and uptake of DREAMS interventions
 - Sexual behaviour
- Dried blood spot for HSV-2 testing

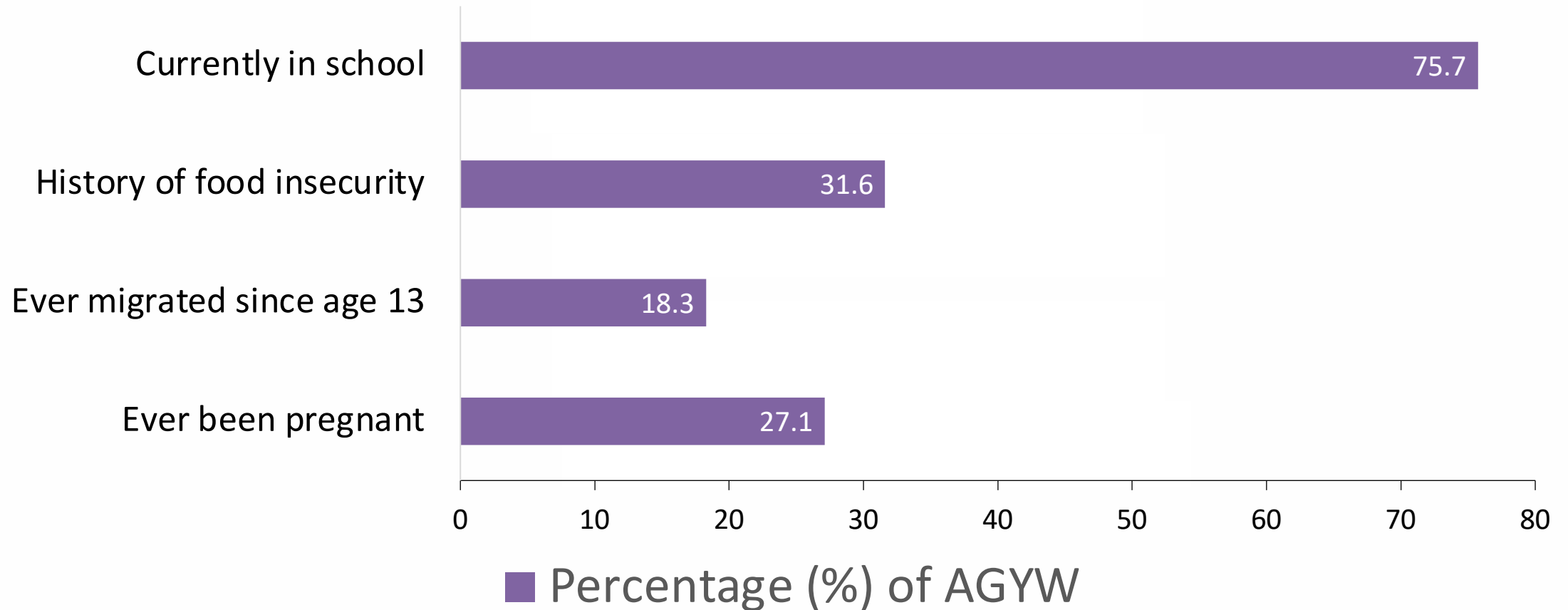
Methods - Analysis

- AGYW considered DREAMS beneficiaries if reported either:
 1. Receiving an invitation to participate in a DREAMS activity
 2. Participating in services provided by local DREAMS implementing organizations in the past 12 months
- HSV-2 incidence: Calculated for AGYW with a first negative test plus ≥ 1 follow-up test

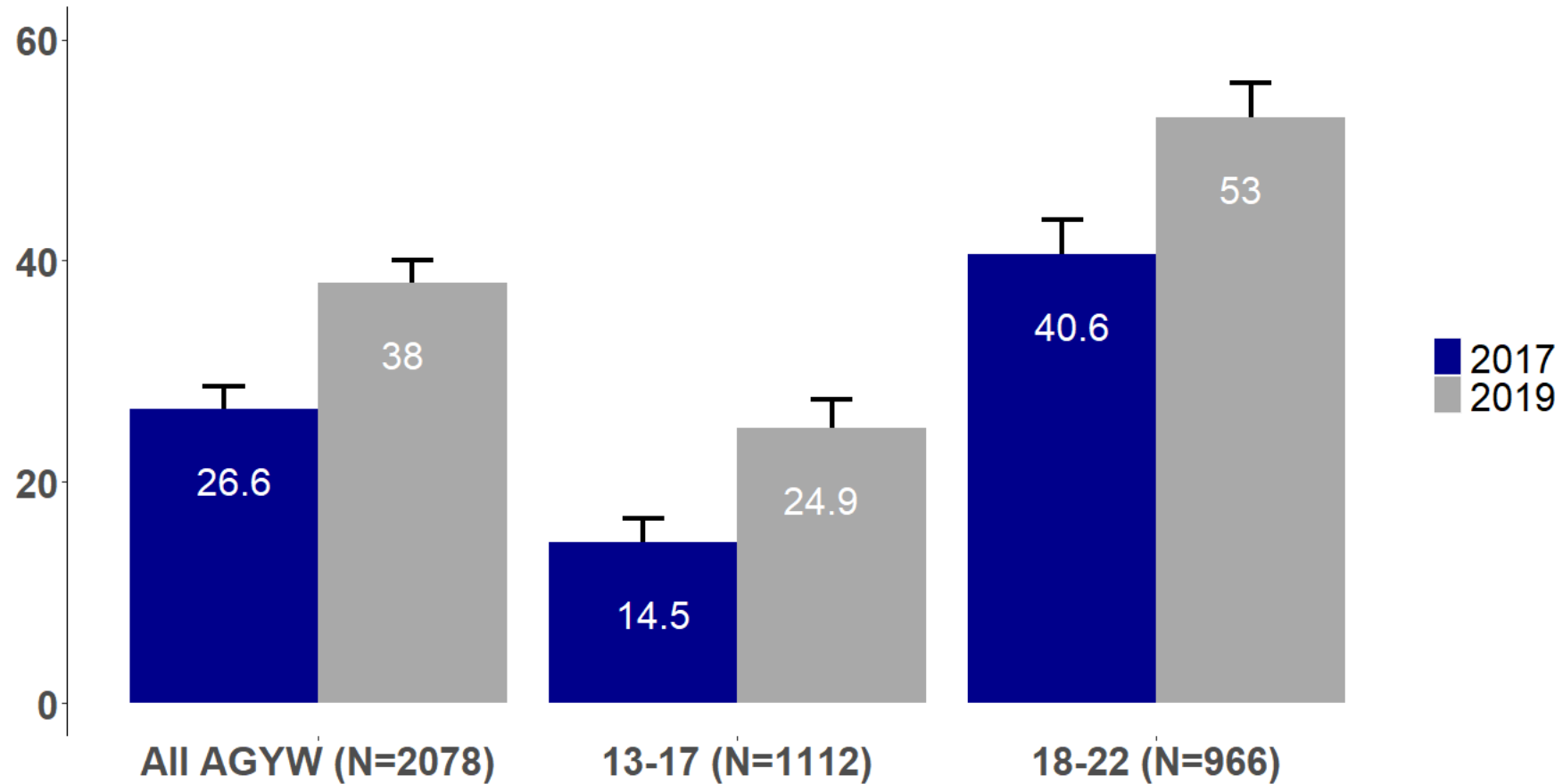
Methods – Analysis (continued)

- HSV-2 sero-conversion dates were estimated as the mid-point between the date of last negative and first positive test
- AGYW who remained negative throughout the study were censored at the last visit date
- Poisson regression models used to estimate relative risk (RR) of HSV-2 infection

AGYW characteristics at baseline (N=2078)



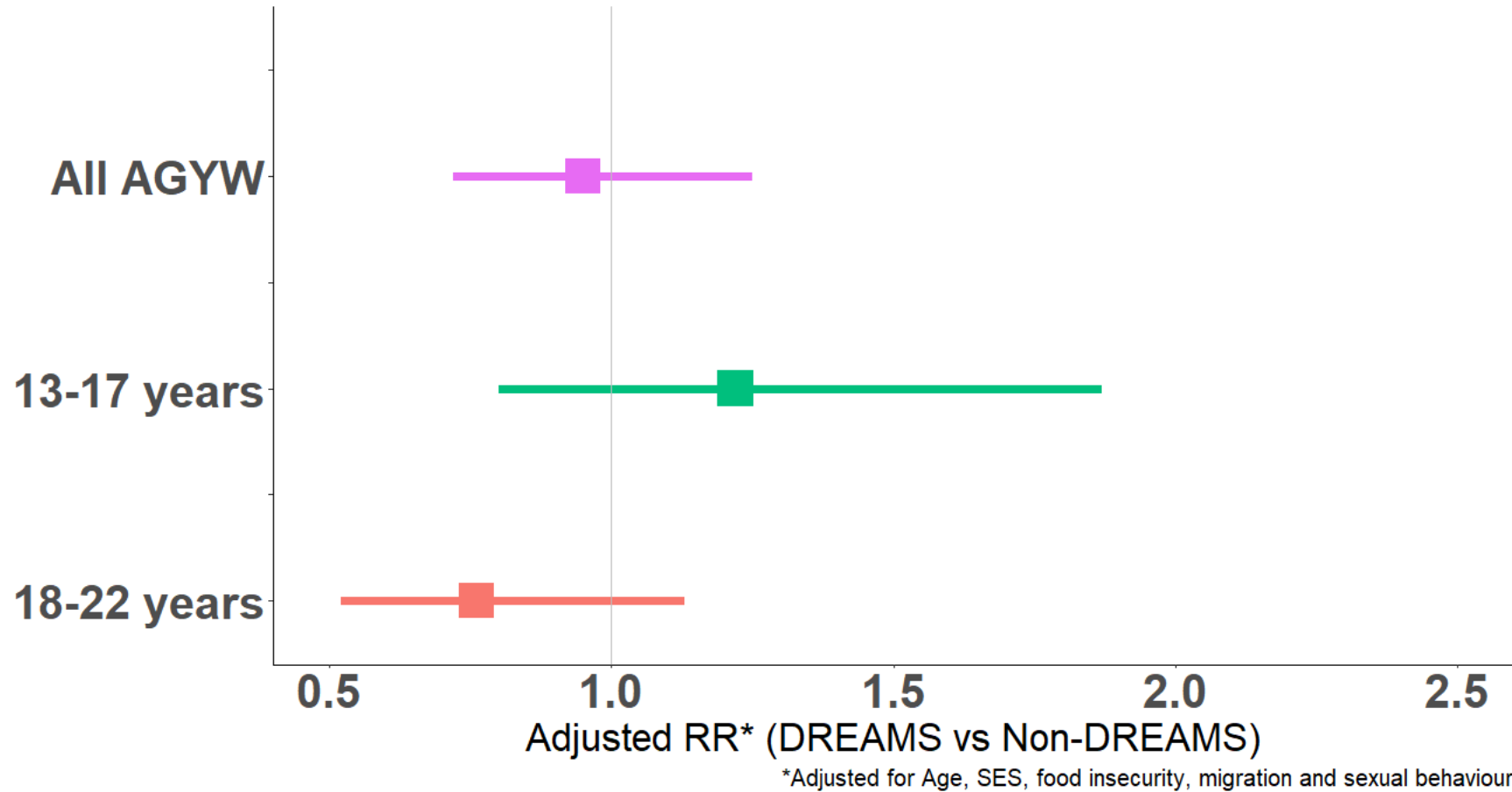
Very high HSV-2 prevalence at baseline and endline



High Incidence rate but non-significantly lower for DREAMS beneficiaries

	Number with HSV-2 infection	Person time (years)	Incidence/100 person-years (95% CI)
Overall (N=1397)	241	1652	15.4 (13.6 - 17.5)
Non-DREAMS beneficiary (N=590)	109	648	16.8 (13.9 - 20.3)
DREAMS beneficiary (N=807)	132	914	14.4 (12.2 - 17.1)

HSV-2 risk non-significantly lower among DREAMS-beneficiaries aged 18-22 years



Conclusions

1. Little evidence that DREAMS affected HSV-2 incidence among AGYW in this rural South African setting
2. HSV-2 prevalence and incidence are both very high and likely to be contributing to the high HIV incidence in this setting
3. Sexual and reproductive health interventions and condoms need to be scaled up to reach adolescent girls to prevent rapid acquisition of infections soon after sexual debut.

Acknowledgements

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- **Partners:**

