INCREASED UPTAKE OF BIOMEDICAL HIV PREVENTION BY YOUTH THROUGH COMMUNITY-BASED SRH: A RCT

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BACKGROUND

- Despite free and effective biomedical HIV prevention, Universal HIV Test & Treat (UTT) and Pre-Exposure Prophylaxis (PrEP), 200,000 South Africans acquired HIV in 2019[1]
- Community-based care effective and safe[2-4]
- Identifying people for PrEP is a challenge[5-7]
- 27% of 15-30-year-olds had curable Sexually Transmitted Infection (STI) & self sampling is popular[8-9]

METHODS

- **2x2 factorial RCT**
- 2020 -2022 uMkhanyakude, KwaZulu-Natal
- 1743 eligible 16-29-year-olds were randomly selected from a rural health and demographic surveillance site
- **Randomised into 4 arms:**

Enhanced standard of care **(SoC): mobile adolescent youth friendly services (AYFS)** for differentiated HIV prevention (condoms, Universal Test and Treat, and PrEP if eligible)

Sexual and Reproductive Health (SRH): home-based self-collected specimens for STI testing (GeneXpert for gonorrhoea, chlamydia & trichomonas) and referral to AYFS for integrated SRH and HIV

Thetha Nami peer-support: referral to a peer navigator for needs assessment to tailor health and social support, condom provision and facilitation of AYFS attendance for differentiated HIV prevention

SRH plus Thetha Nami peer support into AYFS

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- **Statistical analysis was Intention to treat analysis**
  - Adjusted a priori for age and sex
  - Primary analysis assumed no interaction between SRH and peer navigator delivery, so estimates the 'main effect' of each intervention
  - Secondary analysis to estimate the effect of each component individually, and the two components combined, against SoC alone, allowing for interaction
  - Kaplan-Meier methods to estimate time to linkage to care

- **Outcomes:**

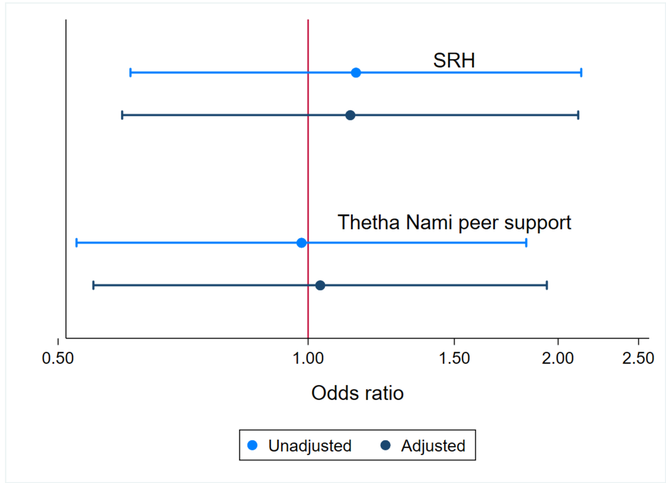
1) Linkage to mobile AYFS for differentiated (tailored) HIV prevention and care within 60 days of enrolment
2) The proportion of participants with transmissible HIV (HIV viral load >400 copies per ml) in dried blood spots (DBS) collected at 12 months

Trial registration: NCT04532307

In a 2x2 factorial RCT of representative sample of youth in South Africa

SRH (community STI testing and sexual reproductive health) increased demand for differentiated biomedical HIV prevention (linkage to AYFS within 60 days) aOR 1.61 (1.32-1.95)

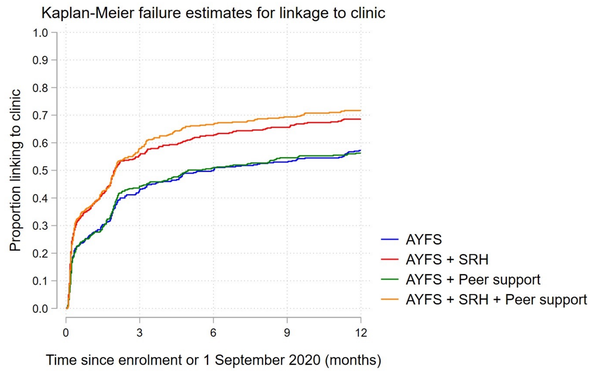
Neither SRH or peer-support resulted in a reduction in prevalence of transmissible HIV



The main effect of SRH or peer support on sexually transmissible HIV
Adjusted for age, sex and area

RESULTS

- 1743 (76%) eligible contacted individuals were enrolled and randomised;
- Baseline characteristics and outcome ascertainment were similar by arm.
- Amongst n=832 randomised to SRH: 29% of women and 16% of men had a curable STI (chlamydia, gonorrhea or trichomonas)
- 732 (42.6%) linked to mobile AYFS by 60 days,
- 152/732 (21.0%) were eligible and started PrEP
- 1168 (67%) provided a DBS at 12 months.
- 227/1168 (19%) tested ELISA-positive for HIV
  - 185 (82%) of which had an undetectable HIV viral load (<400 copies/ml).
- 41/1168 (3.5%) of all who provided DBS had transmissible HIV.



Log rank p-value < 0.0001

LIMITATIONS

- Mobile AFYS was popular and transmissible HIV was lower than background estimates in all four arms (including enhanced SoC arm)
- Peer-support was impacted by COVID lockdown

CONCLUSIONS

- Peer support, STI testing and mobile AFYS were acceptable and feasible
- STI testing and SRH increased uptake of differentiated HIV prevention and care
- No evidence that SRH or peer-support reduced transmissible HIV

We are testing the population effect of peer-led social mobilization into SRH services compared to primary health care delivery of HIV prevention and care in a cluster RCT

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