High prevalence of curable STIs among young women initiating PrEP in Kenya and South Africa

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Background

Sexually transmitted infections (STIs) are common worldwide and are responsible for considerable morbidity, such as pelvic inflammatory disease and tubal infertility, and facilitate the transmission of HIV. In Africa, STIs are often identified and treated based on syndromic assessment due to the limited availability of diagnostic testing. Therefore, data on lab-confirmed STI prevalence are often lacking among these populations.

For women interested in initiating pre-exposure prophylaxis (PrEP) for HIV prevention, diagnosis of an STI is a potential marker for HIV risk. STI screening and treatment at PrEP initiation and during follow-up is recommended as treatment can reduce onward STI transmission as well as risk of HIV acquisition.

Methods

The Prevention Options for Women Evaluation Research (POWER) Cohort is an open label PrEP implementation project testing different PrEP delivery models in three locations to determine cost-effectiveness and scalability:

- PrEP is delivered in accordance with national guidelines to sexually active HIV-negative women ages 16-25
- Mobile service delivery in Cape Town, South Africa
- Youth-friendly clinics in Johannesburg, South Africa
- Public and private family planning clinics in Kisumu, Kenya

Family planning clinics - Kisumu, Kenya

Mobile service - Cape Town, South Africa

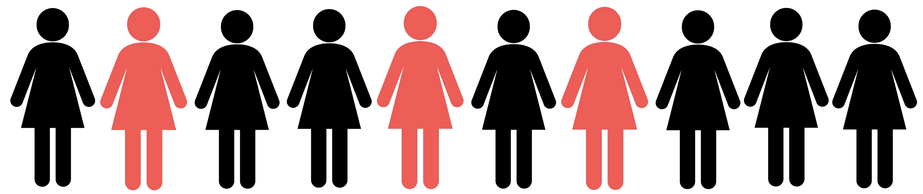
Youth-friendly clinic - Johannesburg, South Africa

- Nucleic acid amplification testing (NAAT) for gonorrhea and chlamydia is conducted at baseline and if positive, national standard of care treatment is provided. Repeat NAAT testing is conducted every six months.

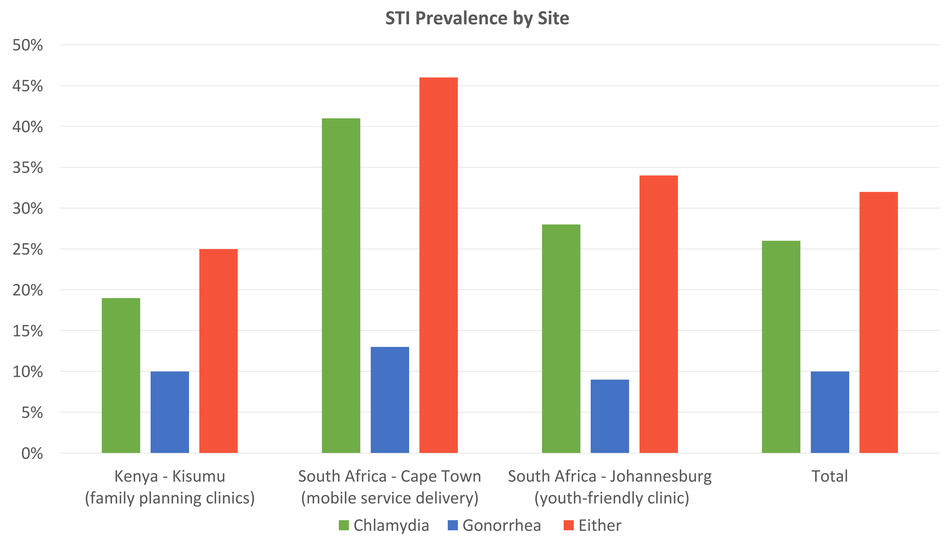
Results

To date, 830 women have enrolled, of whom 742 (89%) women accepted PrEP. Most women (84%) were unmarried and 17% reported having more than one current sex partner. At study enrollment, a third of women (31%) tested positive for a curable STI (26% *Chlamydia trachomatis* and 10% *Neisseria gonorrhoeae*, with 5% having both infections).

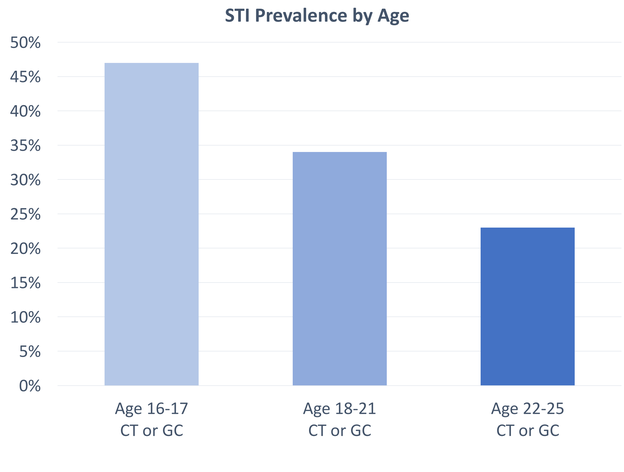
3 in 10 women have a curable STI



Although only 8% of women reported symptoms of an STI at the time of testing, STI prevalence was high across all sites: 30% and 20% at the two clinics in Kisumu, 45% in Cape Town, and 33% in Johannesburg.



Median age of women at baseline was 20: 9% aged 16-17 years, 55% aged 18-21, and 36% aged 22-25. Younger women were significantly more likely to have an STI than older women (47% prevalence among ages 16-17 years, 34% ages 18-21, and 23% ages 22-25, p<0.01).



Conclusions

- Young women in Kenya and South Africa participating in a PrEP implementation project had very high prevalence of gonorrhea and chlamydia, a marker of high HIV risk as well as a cause of adverse reproductive health consequences.
- Although syndromic assessment and management of STIs is standard of care in most African settings, most women with chlamydia and gonorrhea do not present with symptoms and thus are not treated.
- In settings with high prevalence of STIs and particularly in the context of PrEP delivery, STI diagnostic testing with NAATs at PrEP initiation and throughout PrEP follow-up is urgently needed.
- National PrEP programs should consider the feasibility of including diagnostic STI testing.
- Interventions for STI prevention should be included in PrEP delivery and interventions that facilitate easier treatment for young women and their partners to prevent re-infection should be explored.

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