

A Demonstration Open Label Study to Assess the Acceptability, Safety and Use of Truvada Pre-exposure Prophylaxis in Healthy, HIV-Uninfected Adolescents, 15-19 Years of Age.

PLU  PILLS

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Background

- Blinded and open label studies among adults support the efficacy of TDF/FTC for HIV prevention
- No PrEP data available on heterosexual adolescents or adolescents in Africa, to date
- Additional safety and behavioural data in adolescents are needed to support a PrEP indication
- Inform policy for future roll out of PrEP in AGYW

The Pluspills Study



- A Demonstration **Open Label** Study to Assess the **Acceptability, Safety and Use** of Truvada Pre-exposure Prophylaxis in Healthy, HIV-Uninfected Adolescents, **15-19** Years of Age.
- 150 participants
- (under IND)

Primary Objective

- To evaluate the acceptability, **safety** and use of a daily regimen of oral PrEP (FTC/TDF), as a component of a comprehensive HIV prevention package
- Prevention package included: HIV testing, STI management, risk reduction counselling, access to condoms, PEP and referral for male circumcision
- Grades 2, 3 and 4 adverse events according to healthy volunteer tables.

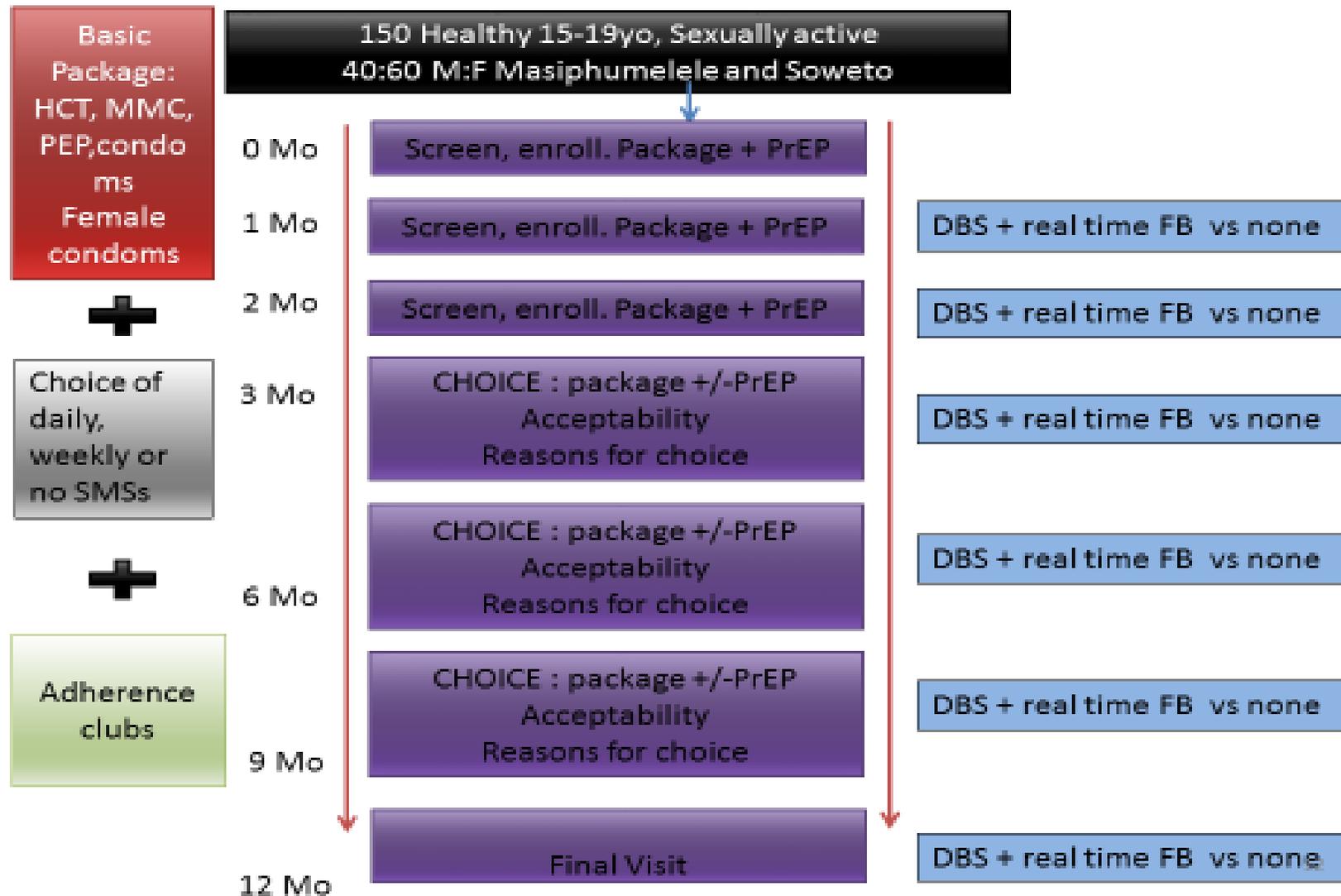
Secondary and Exploratory Objectives

- Secondary
 - Adherence
 - Sexual behaviours: measure any change in sexual activity, perceptions of sexual risk, risk compensation, and condom use
 - Participants' and Partners' attitudes
- Exploratory
 - HIV incidence
 - Effect of biofeedback on adherence
 - Sexual activity and Prep usage

Clinical Eligibility

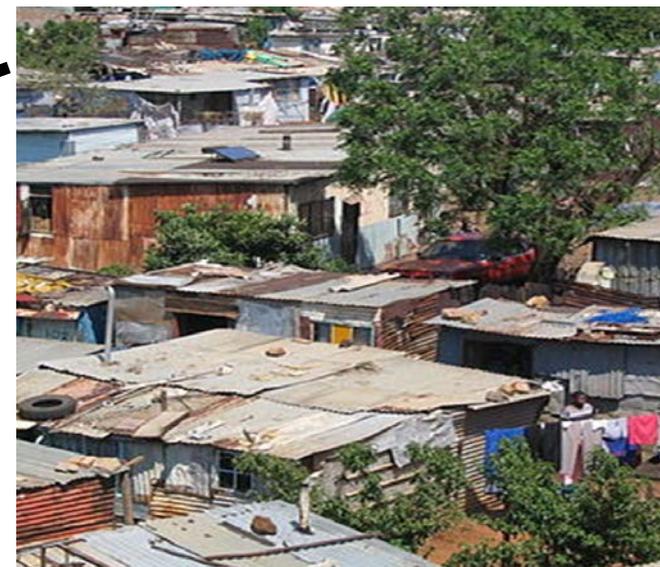
- **HIV uninfected** based on testing performed by study staff at screening and enrollment
- **Sexually active**, as defined as a minimum of one act of (penile vaginal) sexual intercourse in the last 12 months, per self-report
- **Negative pregnancy** test at screening and enrollment and per participant report, does not intend to become pregnant in the next 12 months
- Using an effective method of **contraception** at enrolment, and intending to use a effective method for the study duration.

Study Design



Study Sites- South Africa

Soweto, Johannesburg



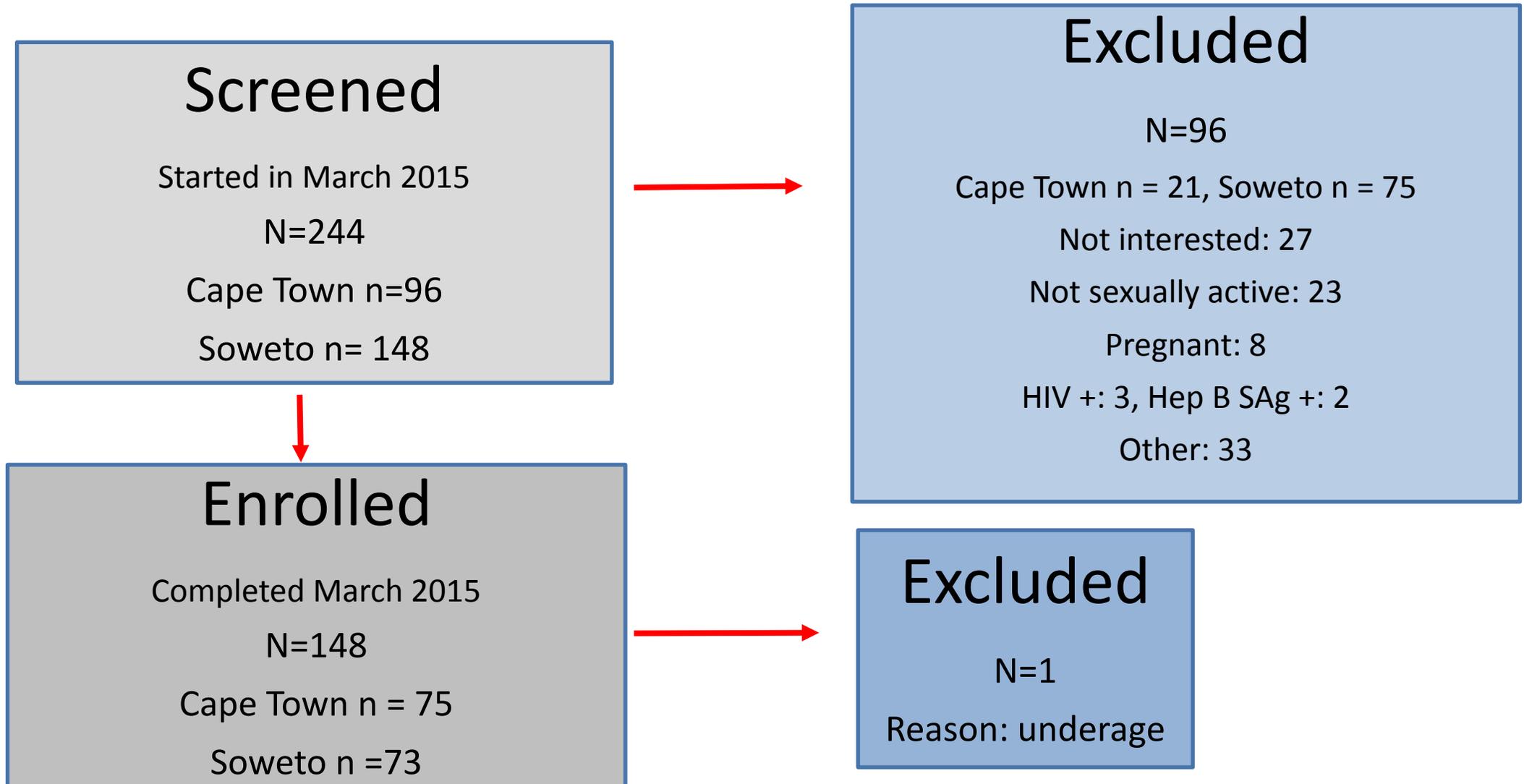
Masiphumelele, Cape Town



Community Engagement and ICF process

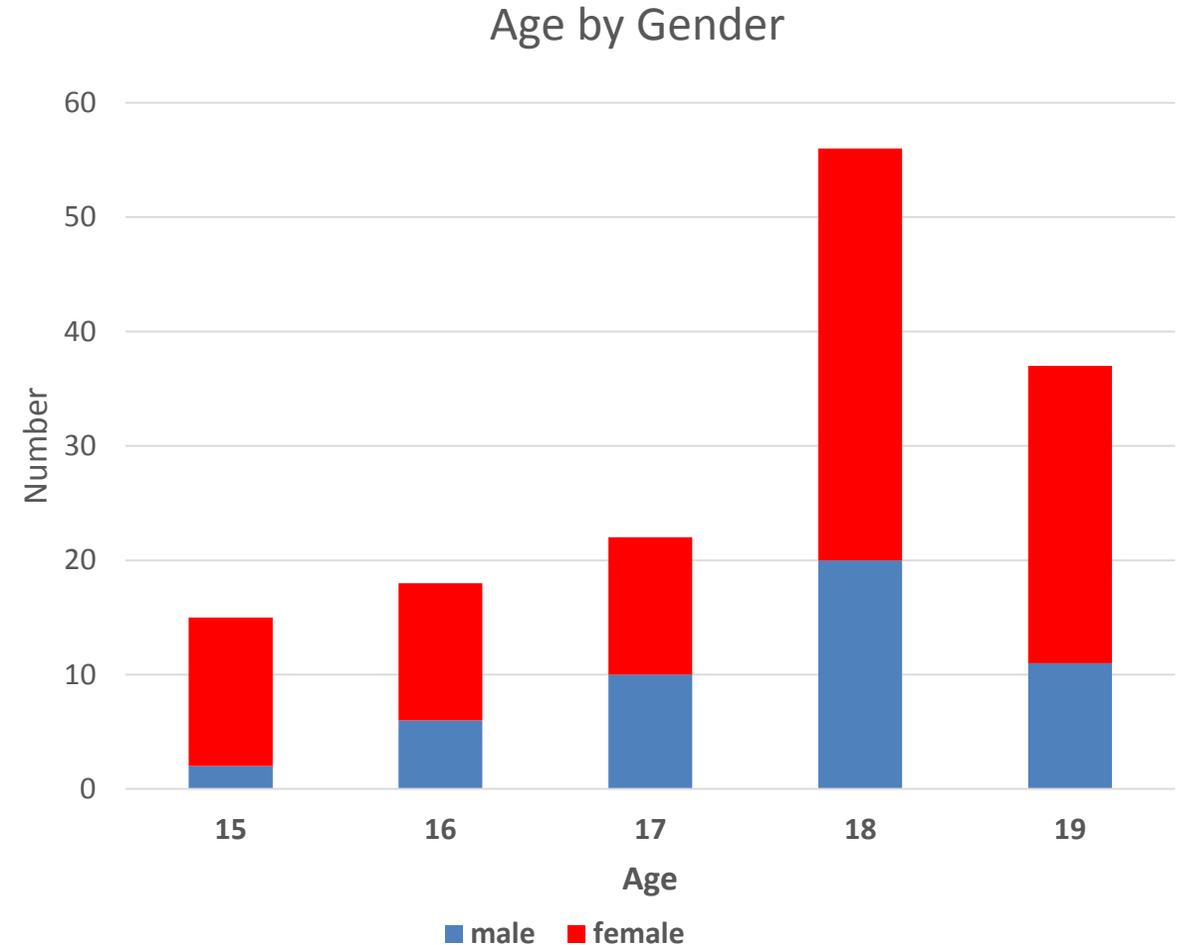
- Sites worked with HAVEG to develop resources that ensure that the ethico-legal framework for adolescent research was implemented
- Community engagement, outreach and education
- Adolescent friendly services
- Parental/ Guardian consent and Adolescent assent/consent
- Development of ICF materials and translation into local languages.

Study Overview



Baseline Demographics

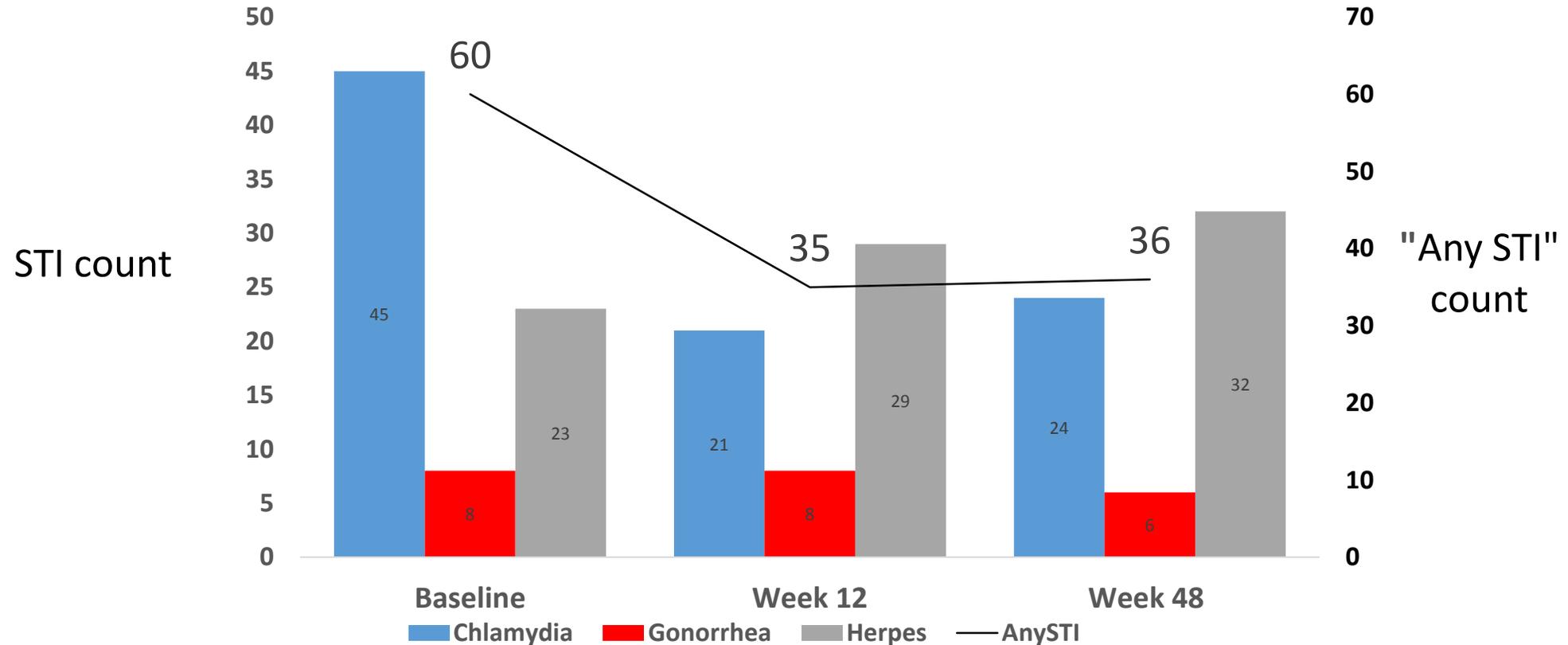
Demographics	
Median Age	18 years
Female / Male ratio	99/ 49
Completed Grade 12	23%
Living with parents/ family	90%
Median age of Sexual Debut	14.5 years
Partner > 5 years older	22%
Transactional Sex	3%
Had anal sex	6%
Condom at last sex act	74%
Always use a condom	34%
Alcohol in last 12 months	57%
Recreational drugs in last 12 months	15%
Any STI at screening	41%



Safety

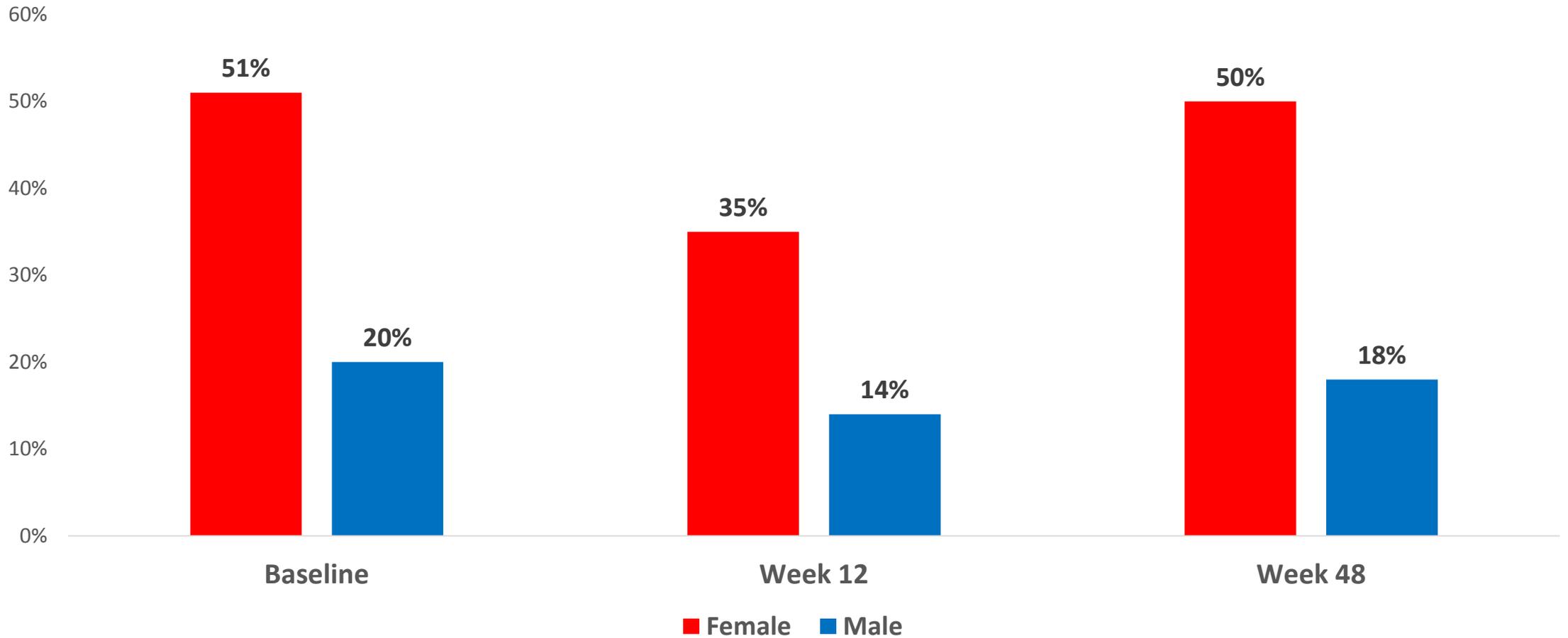
- Well-tolerated overall
 - 11 % (n= 16) participants experienced a grade 2 or 3 related side effect
 - Grade 2:**
 - 4 headaches
 - 4 nausea and vomiting
 - 2 abdominal pain
 - 2 diarrhea
 - 2 skin rash
 - Grade 3**
 - Two Grade 3 adverse events (weight loss) in 2 participants deemed related to study drug
 - Grade 3 weight loss = 10-19%
- No abnormal Creatinine / LFT's
- 18% of participants opted out of PrEP at 12 weeks with about a third citing side effects as the reason for stopping. A further 20% opted out at week 24 or 36.

STI Diagnoses



- 41% of participants had an STI at screening, 28% at week 12 and 38% at week 48
- Herpes incidence: 8,3 per 100 person years (95% CI: 4.31 – 16)

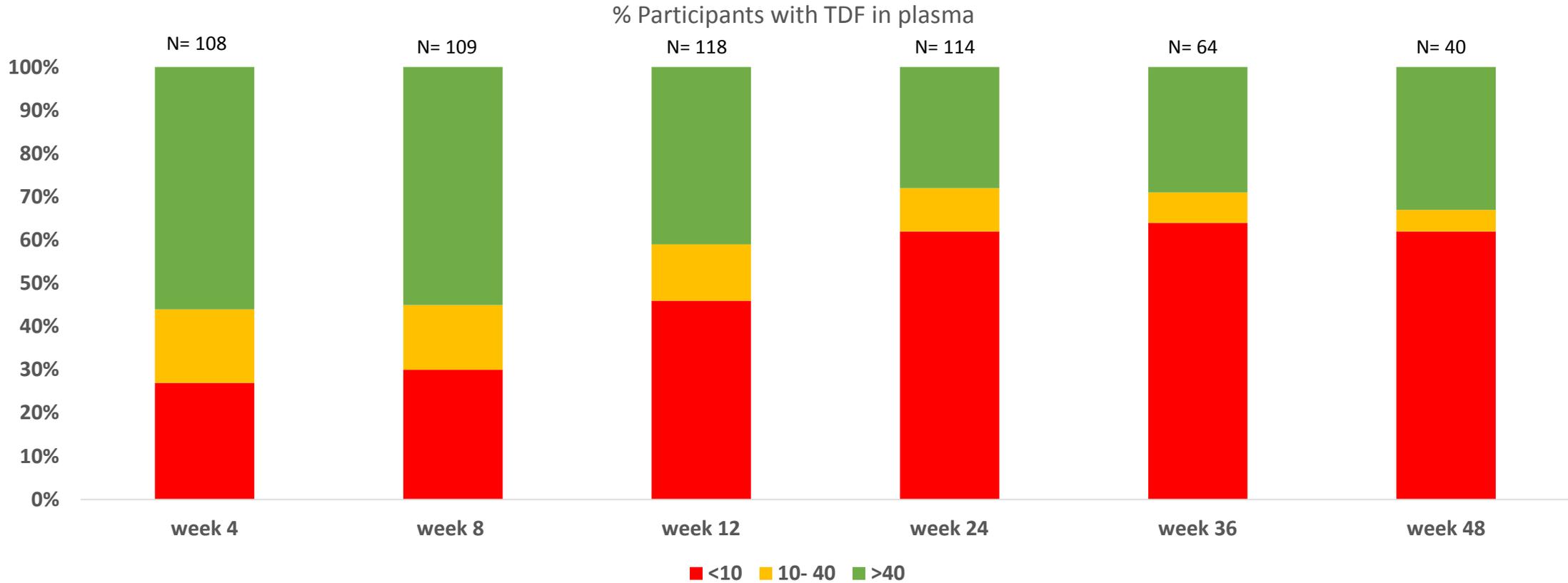
STI by Gender



HIV Incidence

- One seroconversion
- HIV incidence 0.76 per100 person years (95% CI: 0.1-5.37)
- 19 year old woman who had opted out of PrEP 24 weeks prior to diagnosis.

Plasma TDF levels



One third of participants persisted with PrEP
Unknown if these were the most at risk participants

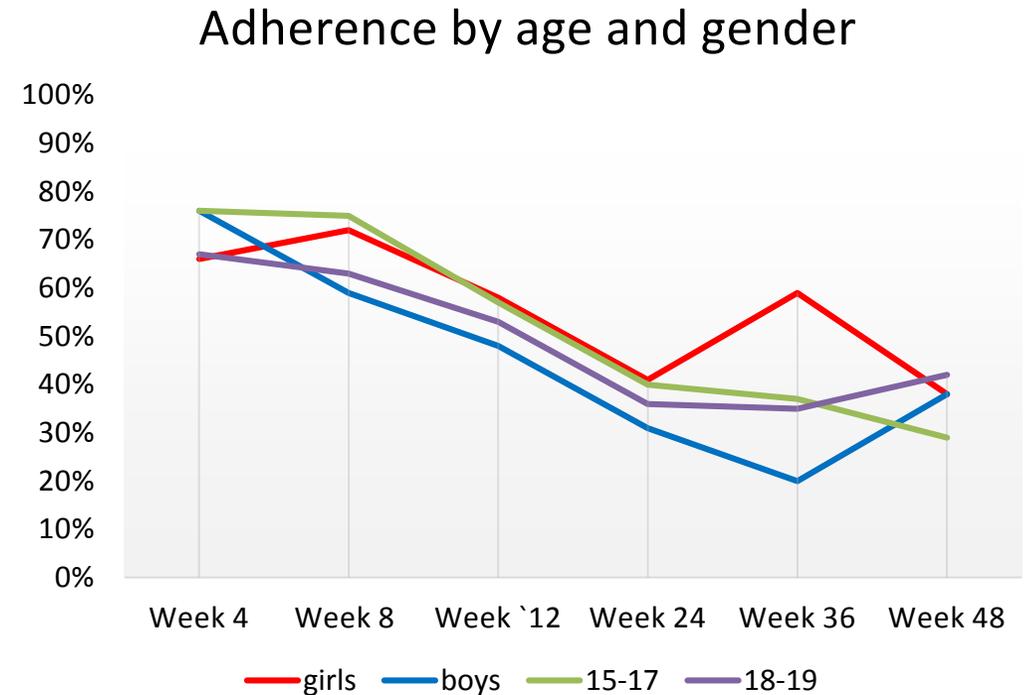
Factors predicting adherence

Plasma TDF ≥ 10

Factor	OR	P value	Confidence interval
Time in weeks	0.89	0.001	0.87-0.94
Age	0.73	0.01	0.57- 0.94
Gender	0.79	0.4	0.43 – 1.45
Site	2.0	0.02	1.11- 3.61

Mixed methods logistic regression model

Young women were not less adherent than young men



Motivators

- Perceived Risk

It was easy for me to participate because I know us teenagers are not perfect, we do things, we party and I thought I needed PrEP, so it was easy for me

- Determination to remain HIV negative
- Desire
- Family/Friends
- Protection
- Reimbursement

I said knowing that you are safe, even if you do a little mistake you know that you are safe.

Adherence Facilitators

- Adherence Clubs
- Drug Results
- Pill returns



Support for Youth

- Parents
- Family
- Celebrities
- Friends
- Partners
- Other participants
- Counsellors
- Staff



Take home points

- Adolescents in South Africa are still at high risk for HIV
- Pluspills was a self selected cohort appropriate for combination prevention
- Adherence to programming notoriously difficult for adolescents worldwide.
- PrEP was reasonably well tolerated with minimal safety concerns
- PrEP usage and adherence diminished over time with less frequent visits (?fatigue or some other factor)
- Women may have out performed young men
- There was an unexpectedly low HIV incidence despite high STI rates which remained constant
- Opportunity to engage on ethical norms in adolescent research.

Conclusions

- South African adolescents need access to PrEP with tailored adherence support and augmented visit schedules
- More research on persistence is needed.
- Other less frequent dosing strategies may also benefit in the future.



The 3P study



**A PILL
A DAY
HELPS
KEEP
HIV
AWAY**

How does PrEP work?

PrEP is an antiretroviral pill, Truvada, that helps HIV negative people stay negative. When taken regularly, PrEP has been shown to reduce the chance of getting HIV by more than 90%. You should take PrEP every day to be sure you are protected against HIV. When the medicine is in your blood, it will stop HIV from taking hold and spreading in your body. If you want to protect yourself against STIs and have extra HIV protection, use condoms. If you want to prevent pregnancy, use contraceptive pills.

**PrEP CAN STOP HIV.
IT'S UP TO EACH OF US TO DO OUR PART.**

**#HIVfreegeneration
SPREAD THE WORD. NOT THE VIRUS.**



THIS IS MY MOMENT

**I AM MY OWN WOMAN.
I AM IN CONTROL.**

**I AM PREPARED
FOR TODAY. FOR THE FUTURE.
FOR LIFE'S TWISTS AND TURNS.**

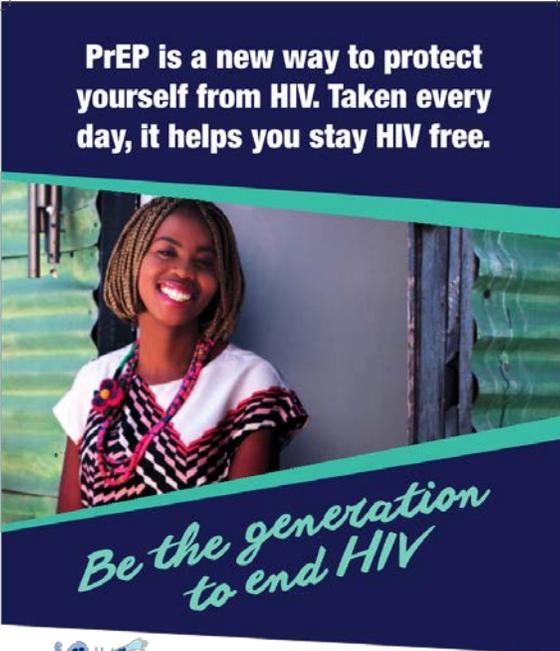
I AM PrEPPEd

PrEP IS A NEW WAY TO PROTECT YOURSELF FROM HIV.
TAKE IT EVERY DAY. IT HELPS YOU STAY HIV FREE. **#getPrEPPEd**



Next Steps

- Focusing on simple and clear messaging for both PrEP users and their parents/ partners/ peers
- Accept that PrEP will not be for everyone
- Understanding adherence vs effective use
- Making HIV prevention a lifestyle choice



PrEP is a new way to protect yourself from HIV. Taken every day, it helps you stay HIV free.

Be the generation to end HIV



To find out if PrEP is right for you, phone 021 785 5454 or visit the DTHF Youth Centre.
Spread the word, not the virus

Acknowledgements

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