



HPTN

HIV Prevention
Trials Network

**A Sub-Study Comparing Acceptability
and Adherence of Daily or Non-Daily
Pre-Exposure Regimens Between Young
and Older South African Women**

HPTN 067

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Introduction

- Young women aged 15-24 in South Africa contribute to 30% of all new infections¹
- Clinical trials have shown PrEP to be protective in preventing HIV acquisition. In the setting of South African women, efficacy has been limited by non-adherence.^{2,3,4}
- PrEP adherence has been found to be poorest in women aged < 25 years old.^{2,3,4}
- Acceptable, effective prevention strategies are required to stem the flow of new infections

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2.Baeten JM, Haberer JE, Liu AY et al. Preexposure prophylaxis for HIV Prevention: Where have we been going and where are we going. *Journal of Acquired Immune Deficiency Syndrome*. 1 July 2013. Vol 63 (2): s122-128

3.FACTS 001 Results Presented at CROI 2015: CONRAD. 24 February 2015. www.conrad.org/new-pressrelease-107.html. Date last accessed: 29 September 2015

4.Van der Straten A, Stadler J, Montgomery E et al. Women's experience with oral and vaginal pre-exposure prophylaxis: the VOICE-C qualitative study in Johannesburg, South Africa. *Plos One* 9(2): e89118. DOI: 10.1371/journal.pone.0089118

Aims & Objectives

Aim 1

- *To evaluate the differences in acceptability of daily vs non-daily PrEP dosing regimens between young and older South African women*

Aim 2

- *To identify differences in barriers and facilitators to PrEP use between young and older South African women*

Aim 3

- *To assess differences in adherence between young and older South African women receiving daily or non-daily PrEP regimens*

Aim 4

- *To assess factors associated with PrEP adherence in both young and older South African women*

Methods

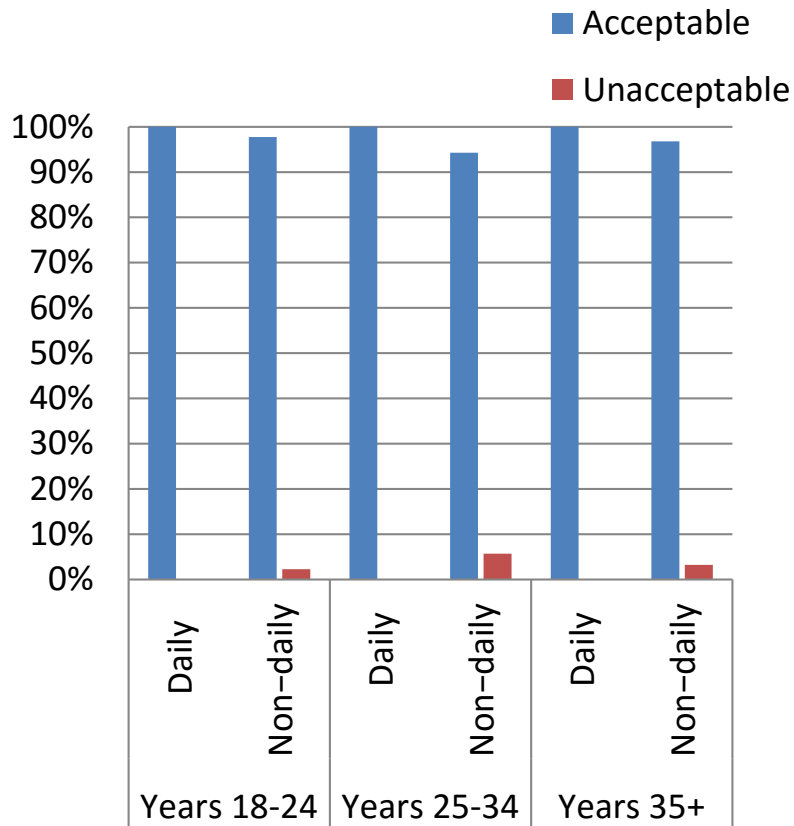
- Secondary data analysis of the HPTN 067 study conducted at Emavudleni Center in township of Nyanga, South Africa
- Women aged ≥ 18 years old, HIV negative
- Open-label study using Truvada, non-daily or daily
- Stratified into three age groups 18-24; 25-34; 35+
- **Acceptability of a PrEP:** determined by selecting PrEP for future use during the Week 30 CASI
- **Barriers & Facilitators:** Participants selected factors that made it 'Hard or Harder' or 'Easy or Easier' for one to follow the prescribed regimen
- **Adherence to a PrEP:** defined as at least 2 pills/week in women. Measured as plasma tenofovir level corresponding with 2pills/week at Week 10, 18 and 30
- **Sociodemographic factors associated with adherence:** in the multivariate analysis, variables with $p\text{-value} > 0.25$ were excluded. Analysis using generalised estimated equations

Baseline Demographic & Characteristics

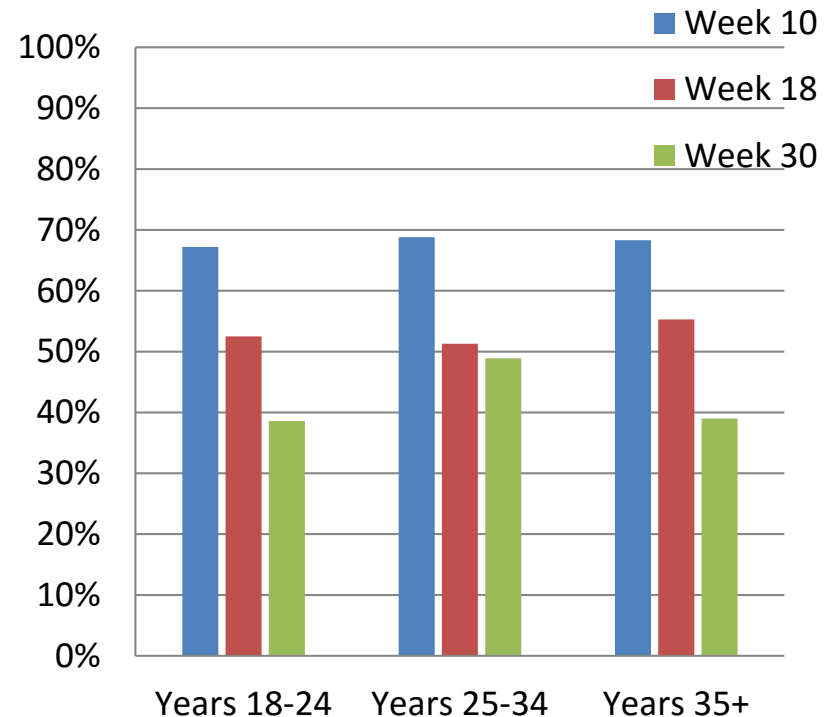
Baseline Demographics and Characteristics of SA Women receiving PrEP				
	Total			
Age groups	18 - 24	25-34	35+	
N Randomized	76	53	49	178
Education				
Secondary	65/76 (85.5)	48/53 (90.6%)	42/49 (85.7%)	155/178(87.1%)
Marital Status				
Never married	73/76 (96.1%)	41/53 (77.4%)	28/49 (57.1%)	142/178(82.6%)
Employment Status				
Unemployed	68/76 (89.5%)	42/53 (79.2%)	37/49 (75.5%)	147/178(82.6%)
Alcohol Use				
Yes	42/76 (55.3%)	29/53 (54.7%)	20/49 (40.8%)	91/178 (51.1%)
HIV Risk Perception				
<50%	45/76 (59.2%)	31/53 (58.5%)	26/49 (53.1%)	102/178(57.3%)

Acceptability & Adherence

Acceptability of Future PrEP Use by age groups



Adherence at three visits by age groups



Barriers & Facilitators to PrEP

Barriers and Facilitators of PrEP among SA women of varying ages				
	18 - 24	25 - 34	35+	P-value
Participants*	70	51	47	
Barriers				
Perceived Stigma	6/70 (8.6%)	5/51 (9.8%)	12/47 (25.5%)	0.0204
Side-effects	10/70 (14.3%)	9/51 (17.6%)	12/47 (25.5%)	0.3019
Poor pill management	58/70 (82.9%)	36/51 (70.6%)	31/47 (66.0%)	0.0918
Alcohol/drug use	14/70 (20.0%)	5/51 (9.8%)	6/47 (12.8%)	0.2655
Other	20/70 (28.6%)	20/51 (39.2%)	22/47 (46.8%)	0.1234
Facilitators				
Altruism	48/70 (68.6%)	40/51 (78.4%)	38/47 (80.9%)	0.2565
Good pill management	45/70 (64.3%)	29/51 (56.9%)	24/47 (51.1%)	0.3521
Structural support	17/70 (24.3%)	20/51 (39.2%)	19/47 (40.4%)	0.1088
Other	26/70 (37.1%)	22/51 (43.1%)	21/47 (44.7%)	0.6739

Perceived Stigma (Items)

- I was worried about others thinking I have HIV because they saw me taking the pill
- I did not have a private place to take the pill
- I was worried about others knowing I am in this study because they saw me taking the pill

Altruism (Items)

- I felt committed to finding a new way to prevent HIV
- I felt committed to the study

Factors associated with Adherence

Multivariate Analysis			
		95% Confidence Interval	P-Value
Employment			
	Employed vs Unemployed	2.05 (1.12; 3.75)	0.0201
Alcohol			
	Used vs Never	1.47 (0.92; 2.36)	0.1077
HIV Risk Perception			
	>=50% vs <50%	1.93 (1.19; 3.11)	0.0072

Summary

- Limitation: sample size was small, secondary data analysis, adherence level of 2 pills/week
- Similarities in acceptability and adherence in young and older South African women receiving daily or non-daily PrEP
- Association between perceived stigma as a selected barrier and women of varying age groups
- Higher HIV risk perception and employment are associated with higher adherence
- Similar oral PrEP strategies can be used in young and older South African women

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