

Examining the Role of Hope in PrEP Willingness, Adherence, and Persistence Among Young African Women

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Key Takeaways

- Hope was associated with PrEP willingness, but not adherence and persistence
- Further investigation is needed to understand how hope may be incorporated into prevention interventions

Background/Rationale

- One in five new HIV diagnoses in Sub-Saharan Africa occur among adolescent girls and young women (AGYW) ages 15-24 years old.
- Studies in Eastern and Southern Africa indicate that AGYW report suboptimal PrEP adherence and persistence.
- Hope is associated with some protective sexual behaviors and ART adherence, but the relationship between hope and PrEP use has not been explored.

Hope and HIV Prevention

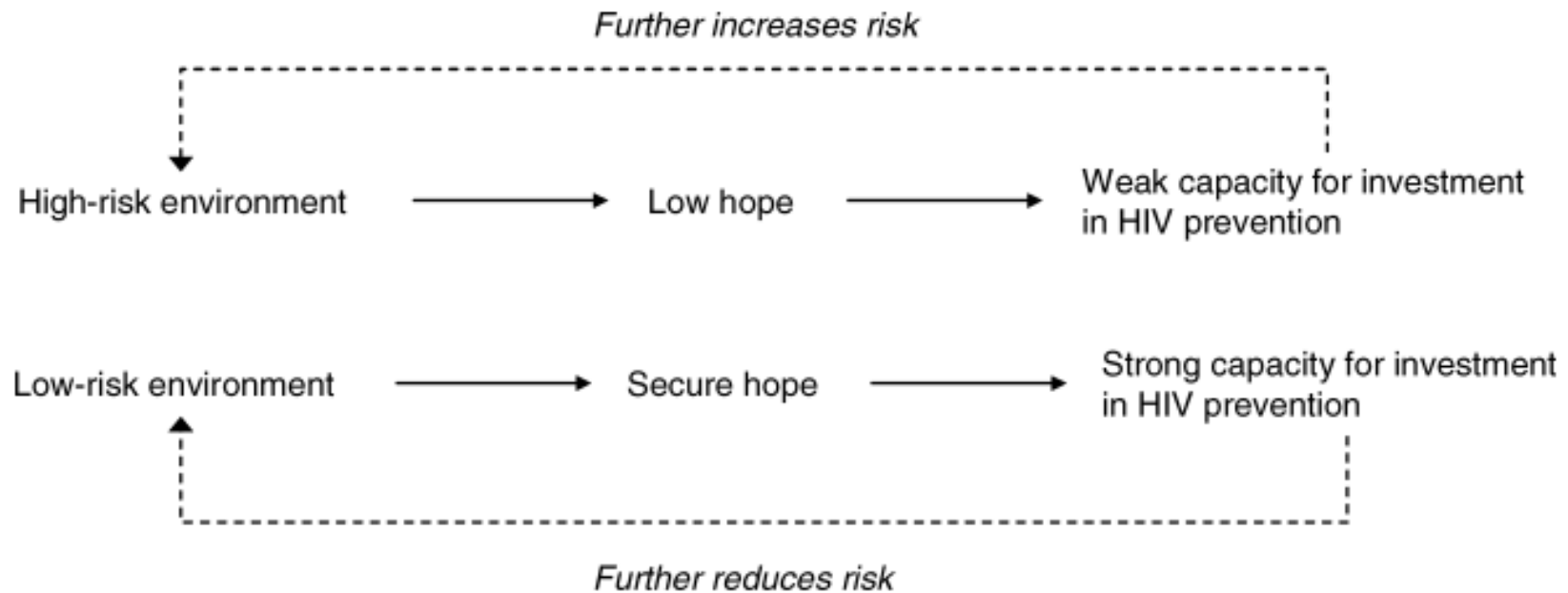


Fig. 1. The relationship between hope and HIV prevention.

Bernay, Rhodes, & Barnett, AIDS, 2007

Project Objectives/Aims



To examine the relationship between hope and PrEP **willingness**



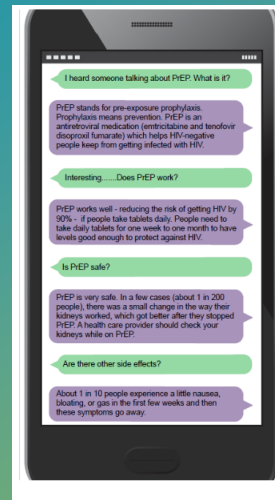
To examine the relationship between hope and PrEP **adherence**



To examine the relationship between hope and PrEP **persistence**

HPTN 082

- **Study Design:** A Phase IV randomized multi-site prospective study to assess PrEP acceptance and adherence among HIV-uninfected young women.
- **Population:** 451 Young women ages 16-25 years
- **Study countries:** Zimbabwe and South Africa
- **Study arms:** Enhanced adherence counseling based on observed drug levels (treatment) vs. Standard adherence counseling (control)
- **Main outcomes:**
 - 95% PrEP uptake
 - DBS confirmed detectable PrEP at month 3 (84%), month 6 (57%), and month 12 (31%)
 - 4 seroconversions



HPTN Q82
HERS

Methods/Analysis Plan

Independent variable: Hope for the future: 6 items, Likert scale, Range: 6-24

Outcome variables:

- Aim 1: PrEP willingness: 7 items, Likert scale, Range: 6-30
- Aim 2: PrEP adherence: Dichotomous (high adherence= TFV-DP ≥ 700 fmol/punch, detectable= TFV-DP ≥ 16 fmol/punch)
- Aim 3: PrEP persistence: Dichotomous (high adherence at months 3 and 6)

Control variables: site, study arm

Analyses:

- Aim 1: Linear regression to examine the relationship between baseline hope and PrEP willingness
- Aim 2: Generalized estimating equations (GEE) to examine association between baseline hope and PrEP adherence at months 3, 6, and 12
- Aim 3: Logistic regression to examine the association between hope and PrEP persistence

Results

Characteristic	Overall (n=451)
Age,	
Median (IQR)	21 (19, 22)
Education	
Primary	9 (2%)
Secondary	388 (86%)
College or University	54 (12%)
Study Site	
Cape Town, South Africa	141 (31%)
Johannesburg, South Africa	162 (36%)
Harare, Zimbabwe	148 (33%)

Results: PrEP Willingness

Hope Scale

Mean: 13.5

SD= 4.7

Median (Q1,Q3)= 15 (10,18)

Cronbach's α =.88

PrEP Willingness

Mean: 15.9

SD= 6.7

Median (Q1,Q3)= 16 (9, 22)

Cronbach's α =.86

At baseline hope was positively associated with PrEP willingness (β =0.62, 95% CI: 0.50, 0.75)

Results: PrEP adherence

Hope **was not** significantly associated with high PrEP adherence (aRR=0.98, 95% CI: 0.94, 1.01) at follow-up.

Hope **was not** significantly associated with detectable PrEP adherence (aRR=0.99, 95% CI: 0.98, 1.01) at follow-up.

Results: PrEP persistence

Hope **was not** significantly associated with PrEP persistence (aOR=0.96, 95% CI: 0.90, 1.02).

Implications/Future Considerations



- Hope is associated with PrEP willingness, but not PrEP adherence or persistence
- Incorporating hope building into PrEP programs may increase willingness to use PrEP
- Further research may be needed to disentangle the relationship between hope and PrEP adherence and persistence

Acknowledgments

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