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Ending AIDS as a Public Health Threat: The Power of Change

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Changing Attitudes Toward PrEP among Sexually Risky Men who have Sex with Men

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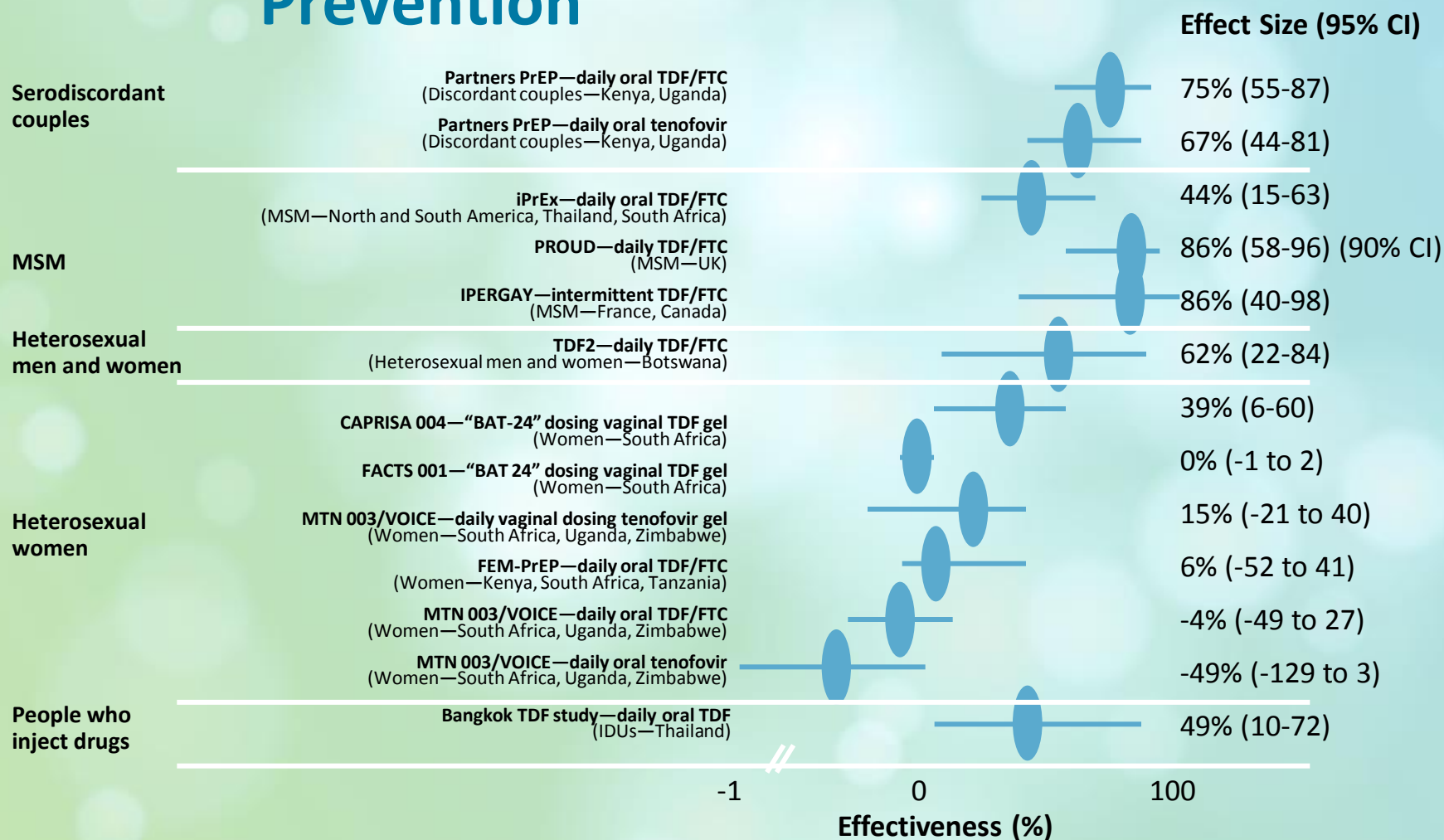


F E N W A Y  H E A L T H



Clinical Trial Evidence for Oral and Topical TDF-Based Prevention

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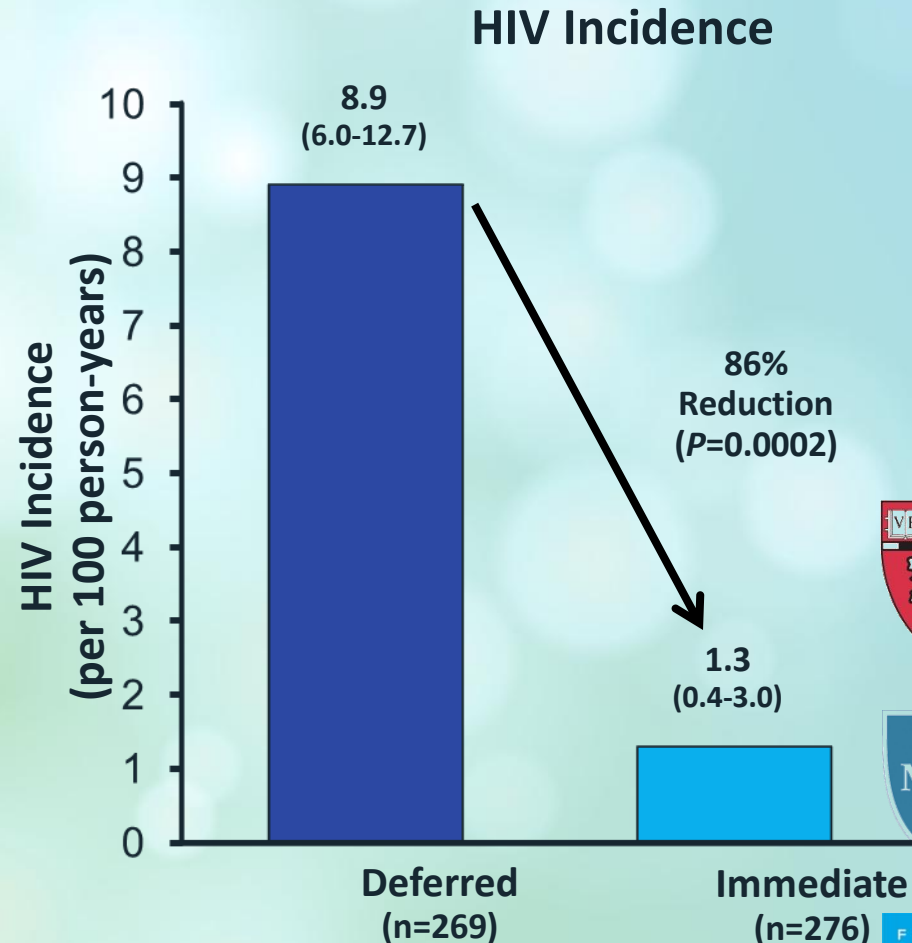


Mayer, KH, et al. Curr Opin HIV AIDS. 2015;10:226-232. Modified from AVAC Report. 2013.



PROUD Study: Results

- Significantly fewer new HIV infections with immediate versus deferred PrEP (3 versus 20 cases)
 - 86% reduction ($P=0.0002$)
- Incident HIV infection in the immediate group
 - HIV infection predated start of ART ($n=1$)
 - No drug/not adherent ($n=2$)
- Number needed to treat to prevent 1 HIV infection: 13

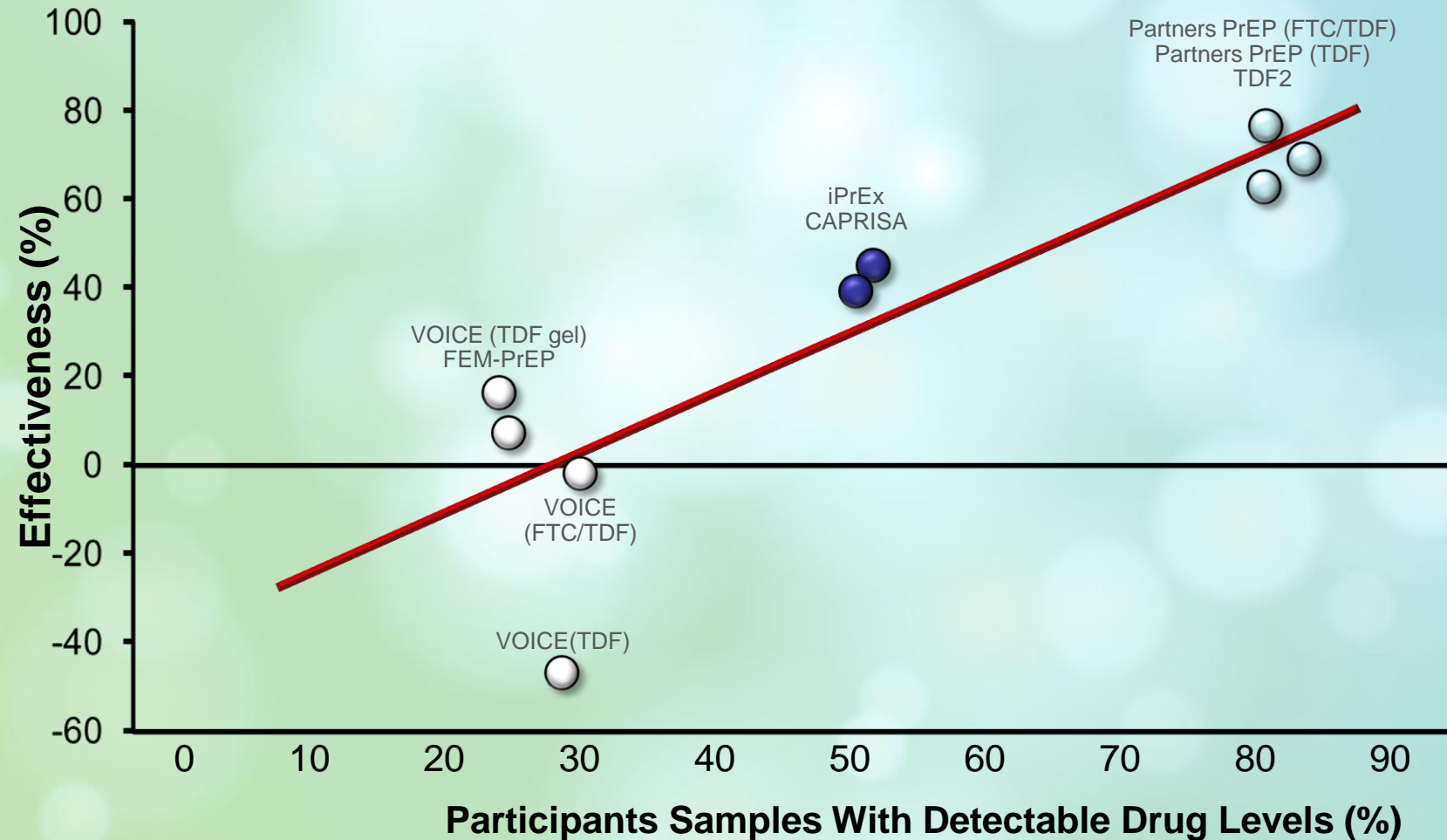


McCormack S, et al. *Lancet*. 2016;387:53-60.



PrEP Is Effective: Adherence Is Critical

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Pearson correlation: 0.86 ($P=0.003$).

AVAC Report 2013. http://www.avac.org/sites/default/files/resource-files/AVAC%20Report%202013_0.pdf.



PrEP in the Media

The New York Times

RESEARCH

Daily Pill Greatly Lowers AIDS Risk, Study Finds

By DONALD G. McNEIL Jr. NOV. 23, 2010

Healthy gay men who took an anti-AIDS pill every day were well protected against contracting H.I.V. in a study suggesting that a new weapon against the epidemic has emerged.

iPrEx Study

PROUD Study

The Washington Post

To Your Health

In new study, 100 percent of participants taking HIV prevention pill Truvada remained infection-free

By Ariana Eunjung Cha September 4, 2015

As far as emotions go, AIDS researchers tend to be a staid bunch who look skeptically at every new finding. But the results of a study released this week on an HIV prevention drug have many cheering.





PrEP and MSM

Barriers to PrEP among MSM include:

- HIV-related stigma,
 - (Oldenburg, Perez-Brumer, et al., 2015; Taylor et al., 2013)
- Perceived promiscuity,
 - (Calabrese & Underhill, 2015)
- Substance use
 - (Taylor et al., 2013; Van der Elst et al., 2013)
- PrEP uptake rates vary by geographic location
 - (Haire, 2015; Hood et al., 2016; Kelley et al., 2015)
- No differences on willingness to take PrEP among sexual risky MSM based upon background and demographic characteristics
 - (Groves, Whitfield, Rendina, Ventuneac, Parsons, 2015)





Purpose of this Analysis

- To examine differing attitudes toward PrEP among MSM within subjects over time.
- To examine differing attitudes toward PrEP among MSM between subjects over time.
- To identify correlates of positive attitudes toward PrEP





Study Design

Accrual Period: 6/2012 – 4/2014

Longitudinal

Wave 1: Baseline
Wave 2: 3 months post baseline

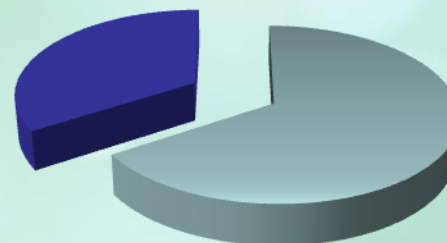
Office Visits

HIV Testing and Counseling
CASI Questionnaires

Retention Rate: 66%

Wave 1: 199 enrolled
Wave 2: 131 retained
No significant differences

Wave 1 Enrollment (n=199)



■ Retained
at Wave 2
■ Attrition at
Wave 2





Assessments

Perceived Effectiveness of PrEP

- (0) Not at all effective
- (1) Slightly effective
- (2) Moderately effective
- (3) Very effective
- (4) Extremely effective
- Don't know

PrEP as a potential prevention strategy is...

- (1) An excellent idea
- (2) A good idea
- (3) A fair idea
- (4) A poor idea
- Don't know





Assessments

Demographics

Mental Health (PHQ)

- Depression
- Panic Disorder

Substance Use Disorders (MINI)

Alcohol Use (CAGE)

Trauma Related Measures

- CSA (Adapted from THRIVE clinical interview)
- IPV (Adapted from HPTN 061)
- HIV Stigma Scale

Social Support Scale





Inclusion Criteria

- 18 years or older
- HIV-uninfected
- No current use of PrEP
- Sexual Risk Behaviors
 - 4 or more male anal sex partners in past 6 months
 - Condomless anal sex with a HIV-positive or status unknown male partner in past 6 months
 - Exchange of money, gifts, shelter, or drugs for sex with male partner in past 6 months





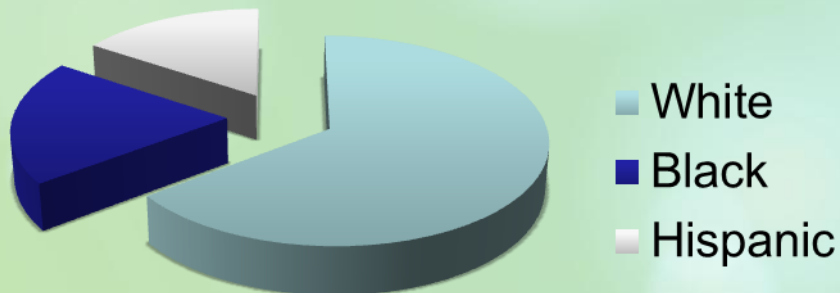
Participants

Completed Baseline (n = 199)

Demographics

Age (SD)		36.9 (11.7)
Race	White	66%
	Black	20%
Ethnicity	Hispanic or Latino	16.0%

Race/Ethnicity



Sexual Orientation	Gay	76.6%
	Hetero	4.3%
	Bi	18.5%
	Other	2.0%

Sexual Orientation





Results

Longitudinal Mean Comparisons

PrEP as good HIV Prevention Strategy (n = 131)

Baseline

Mean 1.95 (.87)

t (130) = -1.43, p = .15

3 month F/U

Mean 2.04 (1.0)

Not Significant

PrEP as Effective (n = 125)

Baseline

Mean 2.36 (.94)

t (124) = -3.74, p < .001

3 month F/U

Mean 2.83 (1.2)

Significant





Results

Cross Sectional Mean Comparisons

PrEP as good HIV Prevention Strategy

6/2012 – 3/2013 (n = 116)

Mean 2.07 (.89)

“good prevention”

t (184) = -1.98, p = .049

4/2013 – 4/2014 (n = 81)

Mean 1.82 (.82)

“good/excellent prevention”

Significant

PrEP as Effective

6/2012 – 3/2013

Mean 2.13 (1.08)

“moderately effective”

t (156) = -3.35, p = .001

4/2013 – 4/2014

Mean 2.66 (.81)

“very effective”

Significant





Results

Sample Enrolled 4/2013 – 4/2014

Significant Correlates of PrEP as good HIV Prevention Strategy

- Substance Use Disorders (better)
- CSA (Adolescence) (worse)
- Sexual IPV (worse)

Significant Correlates of PrEP as Effective

- Social Support (positively)
- Alcohol Abuse (CAGE) (negatively)
- HIV Stigma (negatively)





Limitations

- Findings derived from a community based convenience sample and may not be broadly generalizable
- Sample size for those recruited during the final year of accrual is modest and power to detect some relationships may not have been adequate
- All assessments were based upon self report and are vulnerable to the biases of that methodology
- The context in which PrEP is perceived and evaluated is ever changing and data collected 18 months ago may not accurately reflect current perceptions





Conclusions

View PrEP as an HIV Prevention Strategy

- Initial evidence suggests that sexually risky MSM view PrEP more positively over time
 - More likely to view PrEP as a good prevention strategy
- MSM who report **sexual trauma** as adolescents or adults view PrEP as a potential HIV prevention strategy **significantly less positively**.
- MSM with **substance use disorders** view PrEP as a potential HIV prevention strategy **significantly more positively**.





Conclusions

View PrEP as Effective

- Initial evidence suggests that sexually risky MSM view PrEP more positively over time
 - More likely to view PrEP as effective
- MSM who **abuse alcohol** or who report higher **perceived HIV stigma** view PrEP as **significantly less effective**
- MSM who report higher levels of **social support** view PrEP as **significantly more effective**





Conclusions

MSM view PrEP more positively over time (more likely to view it as effective and more likely to consider it as a good HIV prevention strategy)

MSM who report higher levels of HIV social support and who have substance use disorders are more likely to view PrEP more positively than those who do not. Focused PrEP uptake programs may usefully focus on these subgroups of gay and bisexual men and may indicate the need for integrated treatment programs that address substance use among MSM considering PrEP.

MSM with sexual trauma, high levels of HIV stigma, and who abuse alcohol are less likely to view PrEP positively. This suggests that PrEP education programs in these subgroups may benefit MSM.





Collaborators

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