

Project PHIRE:

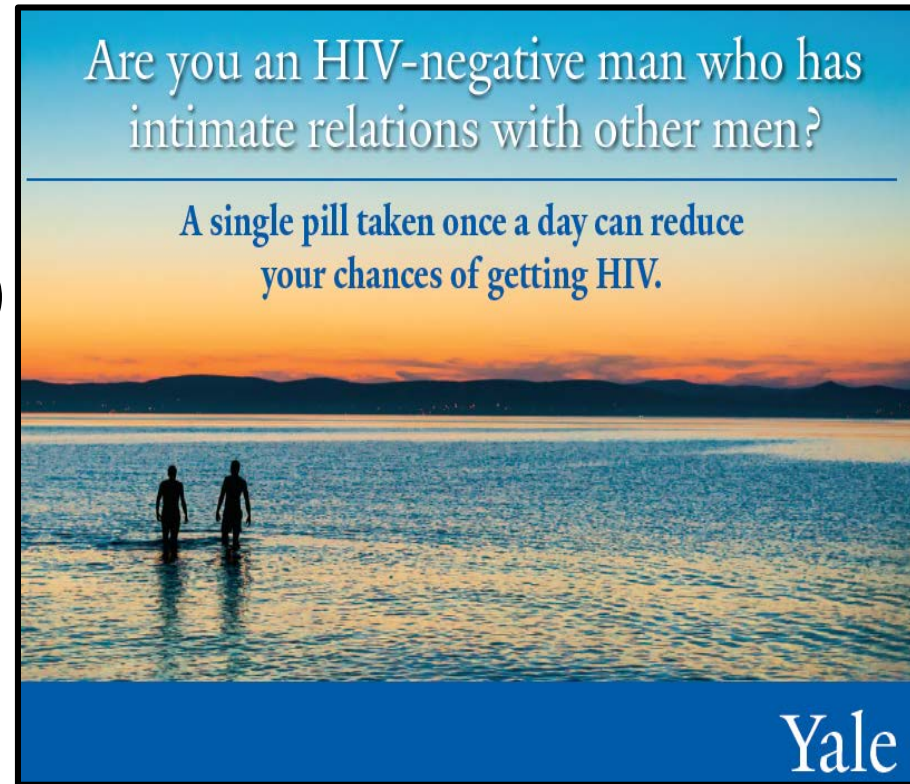
Prep HIV Intervention and Realistic Effects of substance use

Co-PIs:

Onyema Ogbuagu (Yale University)
E Jennifer Edelman (Yale University)
Philip Chan (Brown University)
Brandon Marshall (Brown University)

Study sites:

- ❖ Yale-New Haven Hospital, Nathan Smith HIV clinic, New Haven, Connecticut &
- ❖ The Miriam Hospital, Providence, Rhode Island



Are you an HIV-negative man who has intimate relations with other men?

A single pill taken once a day can reduce your chances of getting HIV.

Yale

Project Aims

Aim 1: To examine the impact of a multi-pronged outreach intervention on expanding reach to MSM, especially those with substance use

- **Hypothesis 1:** Internet-based strategies will be most effective at increasing PrEP reach among MSM with substance use.

Aim 2: Among MSM initiating PrEP, to evaluate the impact of substance use on PrEP-related outcomes, including effectiveness (i.e. risk behaviors), implementation (i.e. adherence) and maintenance (i.e. retention-in-care) at 3 months

- **Hypothesis 2.** Substance-using MSM, compared to those without, will demonstrate increased risk behaviors, decreased PrEP adherence and decreased retention-in-care at 3 months.

Eligibility Criteria

Eligible patients :

- adult (age>18years),
- MSM, M to F transgender
- HIV-negative
- self report unprotected anal intercourse (UAI) with another male in recent 12 months prior to enrollment, and
- able to provide written consent

Exclusion criteria:

- individuals with contraindication for PrEP prescription
- unable to provide informed consent

Recruitment strategies



ONLINE OUTREACH

- Facebook
- Craigslist
- Grindr*

VS



COMMUNITY
OUTREACH

*ongoing (active) strategies

- Clubs, Gay Bars, Bathhouses
- Primary Care and HIV Clinics*
- STD Clinics *
- Community-Based AIDS Service Organizations *
- Addiction Treatment Centers*
- Peer-to-Peer Outreach*

Outcomes and measurements

RE-AIM	Outcome	Measurement
Reach	Success of recruitment strategy	Relative proportion of participants learning about PrEP service for each outreach modality¶
Effectiveness	Risk compensation*	Pre- and post-PrEP initiation HIV risk behavior frequency¶
Implementation	Medication adherence*	Optimal adherence - > 90% PrEP medication use over study period (3 months)¶§
Maintenance	Retention in care*	Return rates for scheduled follow-up clinic visit (month 3)

¶ Per patient self-report

§ Pharmacy refill monitoring

HIV risk behaviors include condomless anal intercourse, sex with HIV+ partner or of unknown status, receipt of money or drugs for sex, sharing needles or drug paraphernalia

***The impact of active substance use on the specified outcomes will also be measured**

(Active substance use will be defined as the presence of unhealthy alcohol use and/or any illicit drug use)

Progress to date: meet our cohort

	Total	Brown	Yale
Number Enrolled	80 (100.0%)	47 (58.7%)	33 (41.3%)
<i>Referred from...</i>			
STD Clinic	18 (22.5%)	18 (38.3%)	0 (0.0%)
Friend	17 (21.3%)	13 (27.7%)	4 (12.1%)
Doctor	15 (18.8%)	6 (12.8%)	9 (27.3%)
Community Organization	15 (18.8%)	5 (10.6%)	10 (30.3%)
Online	7 (8.8%)	0 (0.0%)	7 (21.2%)
Age (median, IQR)	33 (26 – 42)	32 (27 – 45)	33 (25 – 41)
Non-white race	27 (33.8%)	19 (40.4%)	8 (24.2%)
Hispanic/Latino	19 (23.8%)	10 (21.3%)	9 (27.3%)
>High School Education	69 (86.3%)	38 (80.9%)	31 (93.9%)
Ever taken PrEP before	8 (10.0%)	4 (8.2%)	4 (12.1%)

Substance Use & Risk Behavior

	Total	Brown	Yale
In the past 3 months...			
Sex with men + women	4 (5.0%)	1 (2.1%)	3 (9.1%)
Number of oral sex partners (median, IQR)	4 (2 – 10)	4 (2 – 9)	5 (2 – 12)
Number of anal sex partners (median, IQR)	3 (2 – 8)	3 (2 – 8)	5 (2 – 13)

Substance Use & Risk Behavior

	Total	Brown	Yale
In the past 3 months...			
Sex with men + women	4 (5.0%)	1 (2.1%)	3 (9.1%)
Number of oral sex partners (median, IQR)	4 (2 – 10)	4 (2 – 9)	5 (2 – 12)
Number of anal sex partners (median, IQR)	3 (2 – 8)	3 (2 – 8)	5 (2 – 13)
AUDIT-C (median, IQR)	4 (3 – 5.5)	4 (3 – 6)	4 (2 – 5)
AUDIT-C >4 [†]	31 (38.8%)	20 (42.6%)	11 (33.3%)
Drug use past 3 months*			
Marijuana (≥daily)	10 (12.5%)	9 (19.2%)	1 (3.0%)
Marijuana (<daily)	26 (32.5%)	17 (36.2%)	9 (2.7%)
Poppers	24 (30.0%)	14 (29.8%)	10 (30.0%)

[†] AUDIT-C >4 in men denotes a positive screen for hazardous drinking

* <5 participants reported any injection drug use, cocaine, methamphetamine, heroin, MDMA, ketamine, GHB, NMPO, or benzodiazepines in the past 3 months

Summary and next steps

- Feasible to engage substance-using MSM with HIV risk behaviors to utilize PrEP
- > 1/3 of cohort engage in unhealthy alcohol use (other substance use less common)
- Expand recruitment to substance abuse treatment centers
- Assess demographic “reach” of various recruitment strategies across sites
- Evaluate cohort for 3-month outcomes
- Funding for future studies including MSM with unhealthy alcohol use initiating PrEP

It takes a team...

(community partners, clinicians, researchers)

Connecticut

Lydia Barakat
Michael Virata
Perry Tiberio
Adedotun Ogunbajo
Kelly Williams
AIDS Project New Haven
Chris Cole

Rhode Island

Department of Health
AIDS Project Rhode Island
AIDS Care Ocean State
Brown University
The Miriam Hospital
L/T/B CFAR

University of Washington

Emily Williams