

# Characteristics associated with HIV pre-exposure prophylaxis persistence among men who have sex with men

in the United States: results from the American Men's Internet Survey (AMIS) 2023-24

Duygu Islek<sup>1</sup>, Travis Sanchez<sup>1</sup>, Stefan Baral<sup>2</sup>, Supriya Sarkar<sup>4</sup>, Cristian Acero<sup>1</sup>, Jennifer L. Glick<sup>3</sup>, Jeb Jones<sup>1</sup>, Iaah Lucas<sup>1</sup>,

Leigh Ragone<sup>4</sup>, Mariah Valentine-Graves<sup>1</sup>, Michael Smith Jr<sup>1</sup>, Vani Vannappagari<sup>4</sup>

Rollins School of Public Health, Emory University, Atlanta, GA, USA <sup>2</sup>Johns Hopkins School of Public Health, Johns Hopkins University, Baltimore, MD, USA

### Background

- > Men who have sex with men (MSM) have a high likelihood of HIV acquisition, yet information about pre-exposure prophylaxis (PrEP) persistence among MSM remains scarce
- >OBJECTIVE: We examined PrEP persistence and associated characteristics among a nationwide sample of US MSM

#### Methods

### > Recruitment

- Online recruitment through banner ads on social media, sex-seeking and gay interest websites
- Participants completed the online survey between December 2023-August 2024





#### >Eligibility

- 15 years of age or older
- Cisgender male
- Had oral or anal sex with a man at least once in the past OR identify as gay/bisexual (15-17yo only)
- US residence

### >Additional analytic criteria

- Oral or anal sex with another man in the past 12 months
- No self-report of prior HIV diagnosis

#### **≻**Measures

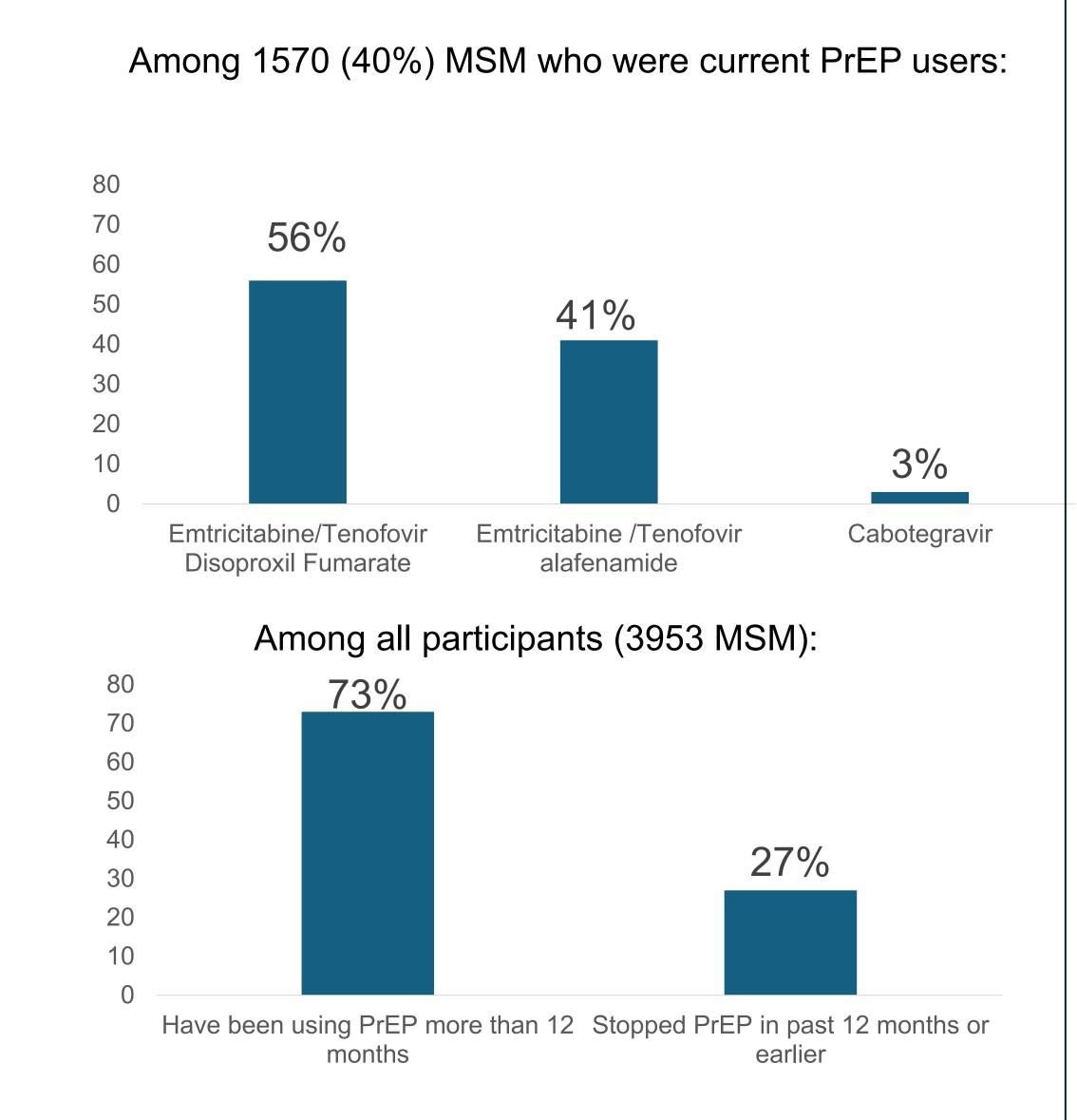
- Participants who reported current use of PrEP were asked, "How many months in a row have you been taking PrEP?" with response options: less than 2 months, 2–6 months, 7–12 months, 13–24 months, or more than 24 months
- PrEP persistence was described as continuous use of PrEP for more than 12 months
- Other measures were PrEP use, modality and switching

#### >Statistical Analysis

- Poisson regression models were used to examine associations between various sociodemographic and behavioral characteristics, mental health service use in past 12 months, depression, and PrEP persistence
- Depression was defined using Patient Health Questionnaire-9

#### Results

- ➤ Of 3953 MSM not living with HIV (Median age 47 years)
- 73% (2837/3953) were non-Hispanic White
- 68% (2632/3953) had private health insurance
- 40% (1570/3953) were currently using PrEP
- ➤ PrEP persistence was
- 72% (n=641) among 885 Emtricitabine/Tenofovir Disoproxil Fumarate users,
- 73% (n=463) among 634 Emtricitabine /Tenofovir alafenamide users,
- 39% (n=20) among 51 Cabotegravir users
- > Among participants who used PrEP 12 months or less (n=439), 16% (n=70) switched to a least one other medication:
- 43 (58%) participants switched to Emtricitabine/Tenofovir Disoproxil Fumarate
- 28 (38%) participants switched to Emtricitabine /Tenofovir alafenamide
- 3 (4%) participants switched to Cabotegravir
- In multivariable modelling:
- MSM aged '25-29' and uninsured MSM were less likely to persistently use PrEP (Table)
- MSM who had more than one male sexual partner and condomless anal were more likely to persistently use PrEP (Table)
- There was no association of race/ethnicity, mental health service use, illicit drug use, or depression with PrEP persistence



Adjusted Prevalence Ratio\*

#### Conclusions

JOHNS HOPKINS

BLOOMBERG SCHOOL of PUBLIC HEALTH

**NEW ORLEANS** 

**School of Public Health** 

- ➤ Nearly three-quarters of PrEP users persisted in their use for over 12 months
- ➤ Age, insurance status, and sexual behaviors play crucial roles in PrEP persistence
- ➤ Interventions should prioritize younger MSM and those without health insurance to improve PrEP persistence
- ➤ Novel approaches, such as longacting PrEP, can further enhance persistence and strengthen HIV prevention among MSM who are young, have no insurance, who report STI diagnosis, condomless anal sex and multiple sex partners.

## Connect with us



prismhealth.emory.edu

Duygu.lslek@emory.edu

linkedin.com/in/duygu-islek

### Table: Association between sociodemographic characteristics and PrEP persistence for more than 12 months, among AMIS participants, 2023-24

	Persistent with PrEP n (%)	Non-persistent with PrEP n (%)	Prevalence Ratio (95% CI)	(95% CI)
Age (years)				
15-24	19 (45.2)	23 (54.8)	0.57 (0.36, 0.90)	0.61 (0.37, 1.01)
25-29	65 (56.0)	51 (44.0)	0.71 (0.55, 0.92)	0.75 (0.57, 0.98)
30-39	264 (66.8)	131 (33.2)	0.85 (0.74, 0.98)	0.87 (0.74 , 1.02)
40+	776 (78.8)	209 (21.2)	ref	ref
lealth insurance				
None	20 (40.0)	30 (60.0)	0.52 (0.33, 0.81)	0.60 (0.37, 0.96)
Private only	880 (76.7)	267 (23.3)	ref	ref
Public only	152 (62.6)	91 (37.4)	0.82 (0.69, 0.97)	0.84 (0.70 , 1.02)
Other	27 (65.9)	14 (34.1)	0.86 (0.59, 1.26)	0.95 (0.63, 1.44)
Public and private	40 (81.6)	9 (18.4)	1.06 (0.78 , 1.46)	1.04 (0.75 , 1.44)
TI diagnosis in past 12 months				
No	844 (69.8)	365 (30.2)	ref	ref
Yes	280 (85.1)	49 (14.9)	1.22 (1.07 , 1.40)	1.14 (0.99 , 1.32)
Condomless anal sex with a male partner				
No	55 (45.8)	65 (54.2)	ref	ref
Yes	1069 (75.4)	349 (24.6)	1.65 (1.25, 2.16)	1.41 (1.05 , 1.88)
lumber of male partners				
One	48 (34.5)	91 (65.5)	ref	ref
More than one	1033 (76.8)	312 (23.2)	2.22 (1.67, 2.97)	2.13 (1.56, 2.92)

### Acknowledgement

- We thank all men who participated in the AMIS study.
- This research was supported by ViiV Healthcare.



### Disclaimer

This content was acquired following an unsolicited medical information enquiry by a healthcare professional. Always consult the product information for your country, before prescribing a ViiV medicine. ViiV does not recommend the use of our medicines outside the terms of their license. In some cases, the scientific Information requested and downloaded may relate to the use of our medicine(s) outside of their license.