Early Adopters: Socio-demographic and Behavioral Correlates of Chemoprophylaxis Use in a Recent National Online Sample of Men who have Sex with Men in the U.S.

Kenneth H. Mayer[1,2,3], Catherine E. Oldenburg[4], David S. Novak[5], Steven A. Elsesser[1], Douglas S. Krakower[2], Matthew J. Mimiaga[1,4,6]

1 The Fenway Institute, Fenway Community Health, Boston, MA; 2 Department of Medicine, Beth Israel Deaconess Medical Center, Boston, MA;
3 Department of Global Health and Population, Harvard School of Public Health, Boston, MA; 4 Department of Epidemiology, Harvard School of Public Health, Boston, MA;
5 Online Buddies Research Institute, Cambridge, MA; 6 Department of Psychiatry, Massachusetts General Hospital, Boston, MA

Background

- HIV pre-exposure prophylaxis (PrEP) has been shown to decrease HIV incidence among men who have sex with men (MSM)[1]
- Despite demonstrated efficacy, uptake of PrEP has not been widespread[2]
- Characteristics of those who initiated PrEP outside of studies are unknown
- The purpose of this study was to enhance understanding of PrEP initiation among MSM in the United States

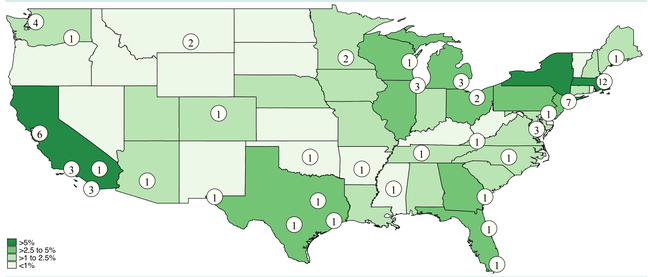
Methods

- In August 2013 an online survey was administered to members of the largest social/sexual partner-seeking website for MSM in the United States
- Participants were asked about awareness and knowledge of PrEP, prior use of HIV post-exposure prophylaxis (PEP) and PrEP, sexual behaviors, and socio-demographic characteristics
- Bivariate and multivariable logistic regression models were built to assess the association between demographic and behavioral factors with PrEP use

Results

- 9,179 MSM responded to the survey, of whom 79% answered the question regarding prior PrEP use
- The sample was geographically diverse with respondents from all 50 states and the District of Columbia
- 88 (1.2%) indicated that they had previously taken PrEP, with the majority obtaining it from their primary provider
- PrEP users more often reported that they had graduated from college, been diagnosed with an STI, were more comfortable talking with their primary provider about MSM sex, and previous use of PEP

Proportion of Participants by State of Residence



Proportion of participants from 48 continental U.S. states and the District of Columbia, with darker shades of green indicating a higher proportion of participants.

Not pictured: Alaska (0.2%) and Hawaii (0.6%)

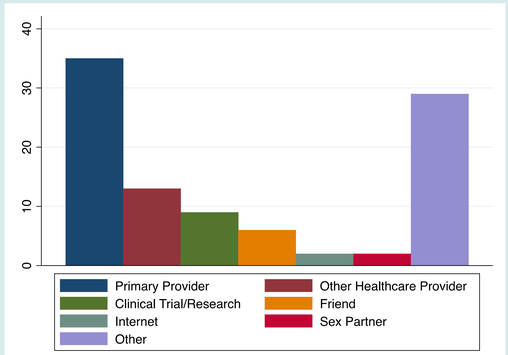
Circles indicate locations where PrEP use was reported and number of participants reporting PrEP use in that location

Descriptive Characteristics

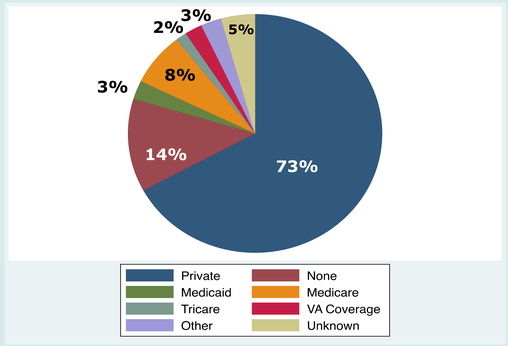
Gender/sexual identity[1]	
Homosexual/gay	4,966 (77.3%)
Bisexual	1,518 (23.6%)
Heterosexual/straight	152 (2.4%)
Transgender M to F	22 (0.3%)
Transgender F to M	5 (0.1%)
Gender queer	72 (1.1%)
College graduate or above (vs. less than college education)	4,368 (68.4%)
Ever diagnosed with an STI	2,656 (30.2%)
Number of male sexual partners in past 3 months	5.4 (8.2)
Any UAS in past month (insertive or receptive)	3,826 (58.7%)
Used PEP	233 (3.2%)
Comfortable talking with provider about MSM sex	1,162 (64.6%)
Substance use during sex	220 (8.6%)

[1]Participants could select more than one option; percentages may not add up to 100%. Denominator changes due to survey attrition.

Sources of PrEP among 88 Users



Insurance Status



Bivariate Factors Associated with PrEP use

Characteristic	Bivariate OR (95% CI)
College graduate or above (vs. less than college education)	3.75 (1.87 to 7.52)
Ever diagnosed with an STI	4.50 (2.90 to 6.99)
Number of male sexual partners in past 3 months	1.04 (1.02 to 1.05)
Any UAS in past month (insertive or receptive)	3.36 (1.99 to 5.99)
Used PEP	53.6 (34.2 to 84.0)
Comfortable talking with provider about MSM sex	5.10 (2.40 to 10.8)
Substance use during sex	3.67 (2.15 to 6.26)

Factors Associated with Use of PrEP in a Multivariable Model

Characteristic	Multivariable OR (95% CI)
College graduate or above (vs. less than college education)	5.33 (1.25 to 22.7)
Ever diagnosed with an STI	2.74 (1.36 to 5.52)
Used PEP	16.0 (8.24 to 31.2)
Comfortable talking with provider about MSM sex	4.19 (1.51 to 11.6)

Limitations

- This was a cross-sectional non-probability sample
- May not be representative of all MSM in the United States

Conclusions

- Although participants in this survey reported substantial levels of HIV risk, their experience of using PrEP was limited
- To increase appropriate PrEP uptake, PCPs will need to be educated about how to provide culturally competent care, so patients will be comfortable discussing HIV risks that could be decreased by PEP or PrEP use with their PCP
- PEP users more frequently reported PrEP use, which may indicate that previous experience with antiretrovirals improves acceptance of PrEP

Acknowledgments

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References

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2 Krakower *et al* Limited Awareness and Low Immediate Uptake of Pre-Exposure Prophylaxis among Men Who Have Sex with Men Using an Internet Social Networking Site. PLoS One. 2012;7(3):e33119.