

FOUR-YEAR TRENDS in AWARENESS and USE of HIV PrEP AMONG gbMSM in VANCOUVER, CANADA

Poster 966

Moliehi Khaketla¹, Nathan Lachowsky^{2,3}, Heather L. Armstrong^{1,2}, Zishan Cui², Mark Hull^{1,2}, Paul Sereda², Robert Hogg^{2,4}, Terrance Mosley¹, Julio Montaner^{1,2}, Eric Roth³, David Moore^{1,2}

1. Faculty of Medicine, University of British Columbia, Vancouver, Canada. 2. British Columbia Centre for Excellence in HIV/AIDS, Vancouver, Canada. 3. University of Victoria, Canada. 4. Faculty of Health Sciences, Simon Fraser University, Burnaby, Canada

Background

- Gay, bisexual and other men who have sex with men (gbMSM) are at highest risk for incident HIV infection in British Columbia (BC), Canada.
- Pre-exposure prophylaxis (PrEP) with emtricitabine and tenofovir disoproxil fumarate was licensed in Canada in February 2016 but is currently not publicly funded in British Columbia (BC).
- We explored 4-year trends in, and factors related to awareness and use of PrEP among a gbMSM cohort in Vancouver, BC.

Methods

- We analyzed data from the Momentum Health Study, a longitudinal cohort study of gbMSM in Vancouver, BC.
- gbMSM aged ≥16 years were recruited through respondent-driven sampling and completed a computer-assisted self-interview at enrolment with follow-up every 6 months.
- Stratified by HIV status, we examined awareness and use of PrEP among participants using data from February 2012 to February 2016.
- We conducted univariable and multivariable generalized linear mixed effect model analyses to examine trends in the proportion of participants aware of and using PrEP, and then to identify factors associated with PrEP awareness over time among HIV-negative gbMSM.

Results

Table 1. Select baseline descriptive statistics of participants

Variables	Overall		HIV Negative		HIV Positive	
	n	%	n	%	n	%
Age						
<30	278	38.0	268	50.8	10	4.9
30 - 44	237	32.4	169	32.0	68	33.3
45+	217	29.6	91	17.2	126	61.8
Annual Income						
<30K	452	61.8	304	57.6	148	72.6
30-60K	192	26.2	151	28.6	41	20.1
60K+	88	12.0	73	13.8	15	7.4
Ethnicity						
Caucasian	554	75.7	396	75.0	158	77.5
Asian	69	9.4	56	10.6	13	6.4
Aboriginal	46	6.3	27	5.1	19	9.3
Latino	34	4.6	27	5.1	7	3.4
Other	29	4.0	22	4.2	7	3.4
Sexual Orientation						
Gay	617	84.3	441	83.5	176	86.3
Bisexual	70	9.6	51	9.7	19	9.3
Other	45	6.2	36	6.8	9	4.4
Education						
No more than high school	162	22.1	104	19.7	58	28.4
Greater than high school	570	77.9	424	80.3	146	71.6

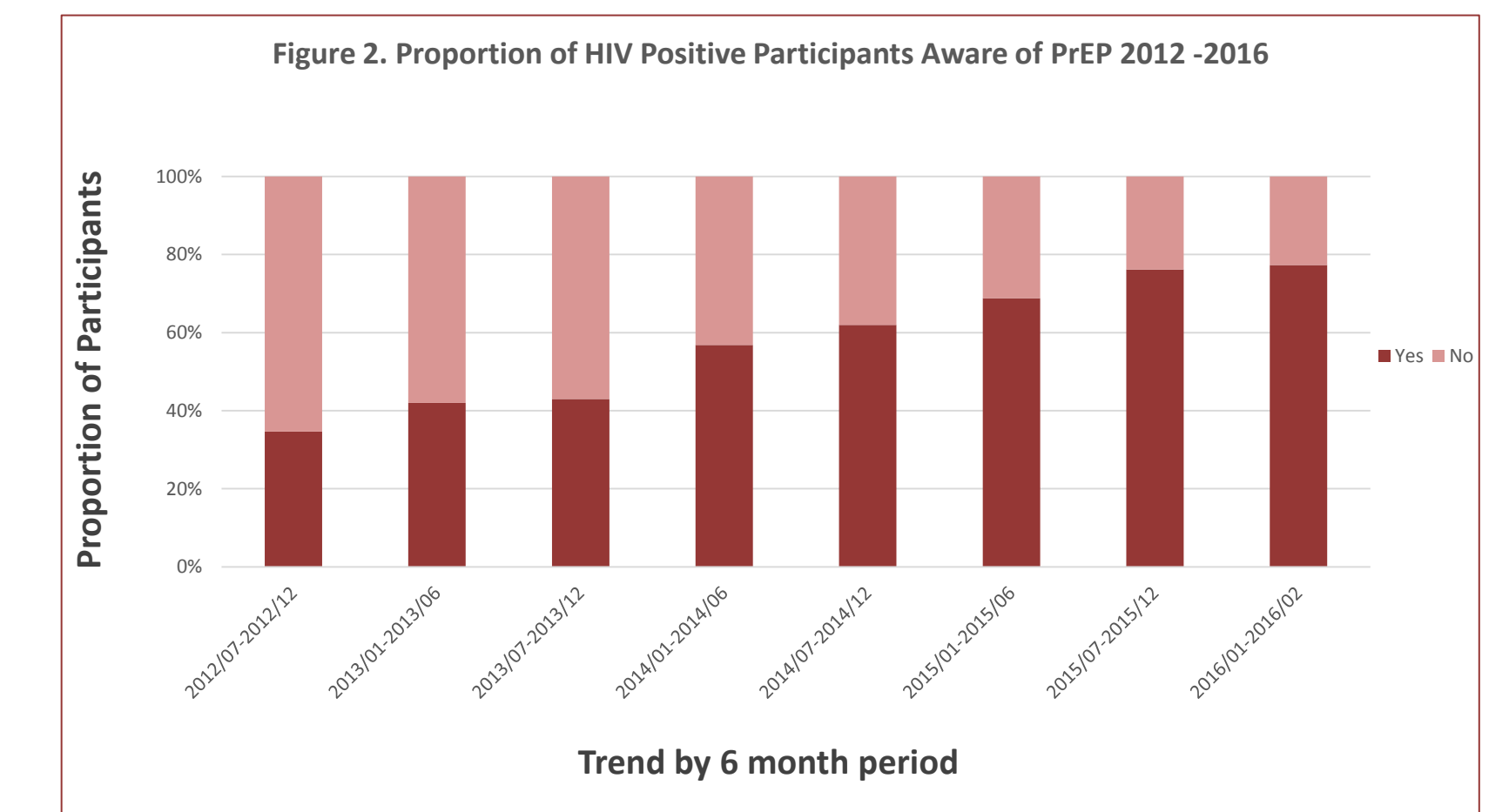
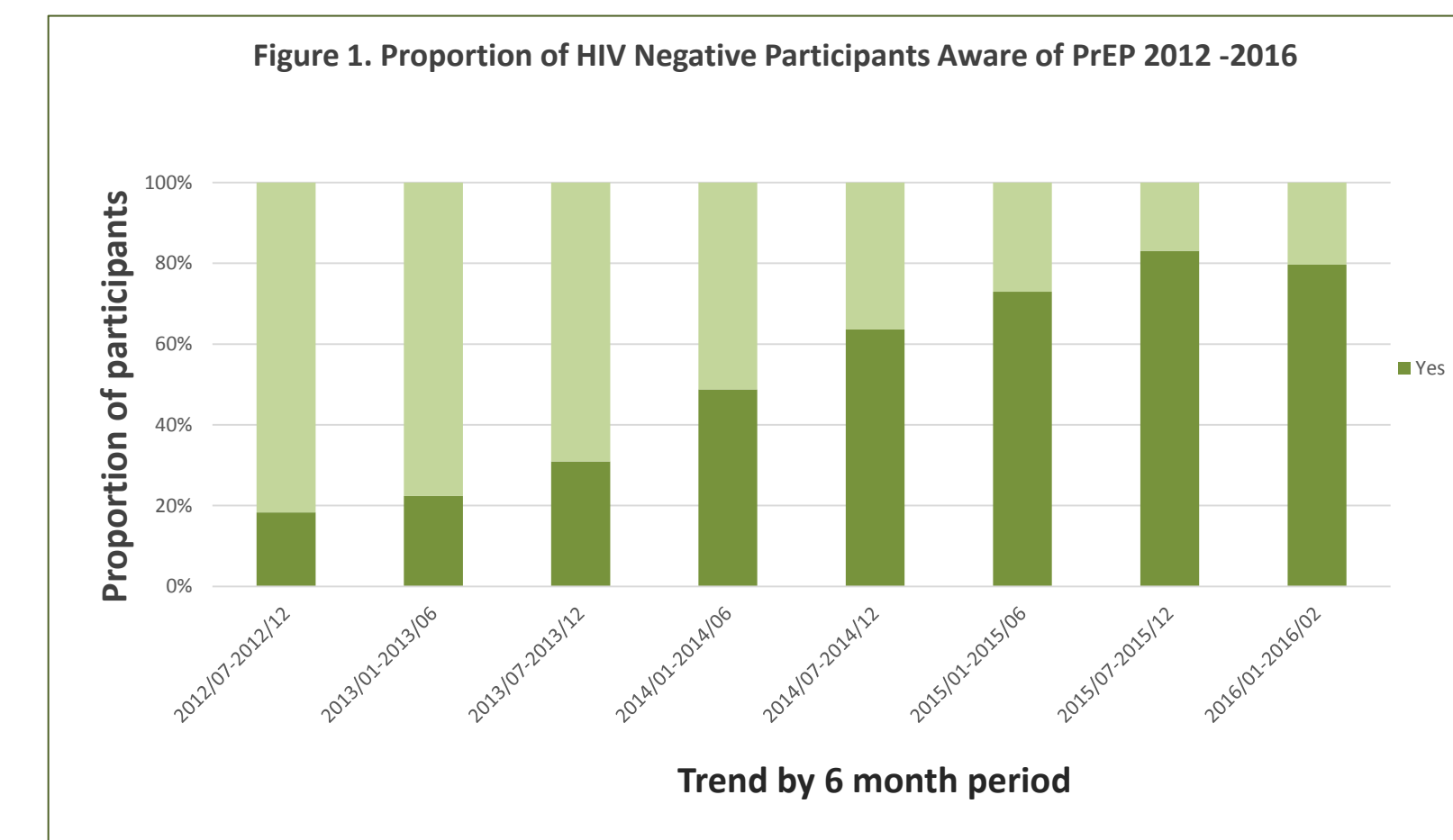
Results

Table 2. Multivariable model of factors associated with PrEP awareness among HIV-negative gbMSM

	aOR	95% CI
Annual Income		
<30K	Ref	
30-60K	1.57	1.19 2.08
60K+	2.24	1.52 3.30
Ethnicity		
Caucasian	Ref	
Asian	0.72	0.46 1.13
Aboriginal	0.36	0.17 0.76
Latino	0.40	0.20 0.79
Other	0.90	0.42 1.92
Sexual Orientation		
Gay	Ref	
Bisexual	0.59	0.35 1.00
Other	1.49	0.93 2.39
Education		
No more than high school	Ref	
Greater than high school	2.10	1.40 3.16
Relationship Status		
Monogamous/Married	Ref	
(Partially) Open	1.08	0.76 1.55
Single (No current partner)	0.70	0.52 0.94
Viral Load Sorting for Prevention, Past 6 months		
No	Ref	
Yes	2.56	1.69 3.89
Age		
18-28	Ref	
29-40	1.66	1.21 2.29
41-48	1.50	0.93 2.42
49+	1.46	0.96 2.24
Received Drugs for Sex		
No	Ref	
Yes, in P6M	0.63	0.29 1.37
Yes, not in P6M	0.22	0.08 0.64
Used Ecstasy in Past 6 Months		
No	Ref	
Yes	1.46	1.08 1.97
Number of Past STI Diagnoses		
1	Ref	
2+	1.97	1.03 3.80
0	1.44	0.92 2.24
Sensation Seeking Scale (study α=0.73)	1.04	1.00 1.07

Results

- 2991 study visits were completed by 732 participants (median follow-up 2.5 years), of whom 27.9% were HIV-positive, 75.7% Caucasian and median age was 34 years.
- The proportion of HIV-negative men who were aware of PrEP increased from 18% in 2012 to 80% in 2016 (p<0.001 for trend); among HIV-positive men, awareness increased from 35% to 77% (p<0.001).
- While 73% of HIV negative men reported to have insurance that covered prescription medication, only 8 (2%) reported using PrEP in any 6-month period.
- In the final model, HIV-negative men were more likely to be aware of PrEP if they had annual incomes ≥\$60,000, had more than a high school education, were aged 28 – 40, reported viral load sorting as an HIV prevention practice, had used ecstasy in the past 6 months, scored higher on the Sensation Seeking Scale and had reported a history of ≥2 previously diagnosed STIs.
- gbMSM who were Aboriginal or Latino, who were single and who had received drugs for sex were less likely to be aware of PrEP.



Conclusions

- PrEP awareness increased dramatically over time, and was associated with several HIV risk behaviours among HIV-negative gbMSM.
- However, only a small proportion of HIV-negative gbMSM reported PrEP use, highlighting that PrEP access should be expanded for at-risk gbMSM in BC.

References

Health Canada. (2016). Regulatory decision summary: TRUVADA. Retrieved from <http://www.hc-sc.gc.ca/dhp-mpps/prodpharma/rds-sdr/drug-med/rds-sdr-truvada-187173-eng.php>
 Public Health Agency of Canada. (2014). HIV and AIDS in Canada: Surveillance Report to December 31st, 2013

Acknowledgements

We thank the research participants for sharing their important data, and our community colleagues at the Health Initiative for Men, YouthCO HIV & Hep C Society of BC, and Positive Living BC for their support. This work was supported by the Canadian Institutes for Health Research [107544]; National Institutes for Health, National Institute for Drug Abuse [R01DA031055] and Health Canada.



Presenting author
 Dr. Moliehi Khaketla
 mkhaketla@alumni.ubc.ca

