

Awareness and Acceptability of Pre-Exposure Prophylaxis among Gay, Bisexual, and other Men who have Sex with Men in Vancouver, BC: Implications for Implementation

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Background

- Gay, bisexual and other men who have sex with men (GBMSM) represent >50% of all new diagnoses in British Columbia (BC) in 2016.¹
- Pre-exposure prophylaxis (PrEP) is a biomedical HIV prevention strategy that has been demonstrated to significantly decrease HIV acquisition, particularly among GBMSM.²
- As of January 2018, PrEP is publically available in BC based on clinical risk-assessment, including the HIRI-MSM risk index and an infectious syphilis or rectal bacterial sexually transmitted infection (STI).
 - These indicators have been associated with increased HIV risk for MSM in BC³
- As a component of PrEP implementation, we sought to **identify levels of PrEP awareness among high-risk GBMSM, and evaluate preferences for PrEP service delivery in Vancouver.**

Methods

- Data were derived from a cross-sectional survey of HIV-negative GBMSM in Vancouver, BC.
- Respondents were recruited in-person at three sexual health clinics and at bathhouses, between March–December 2017.
- Respondents completed a self-administered online survey capturing demographic information, HIV risk factors, PrEP knowledge, and preferences for service delivery (e.g., STI clinic, family doctor, or PrEP specialist clinic).
- Categorical variables were compared using Chi-squared test or Fisher's exact test; continuous variables were compared using Wilcoxon rank sum test.
- All analyses were conducted using SAS version 9.4 with level of significance set at 0.05.

Results

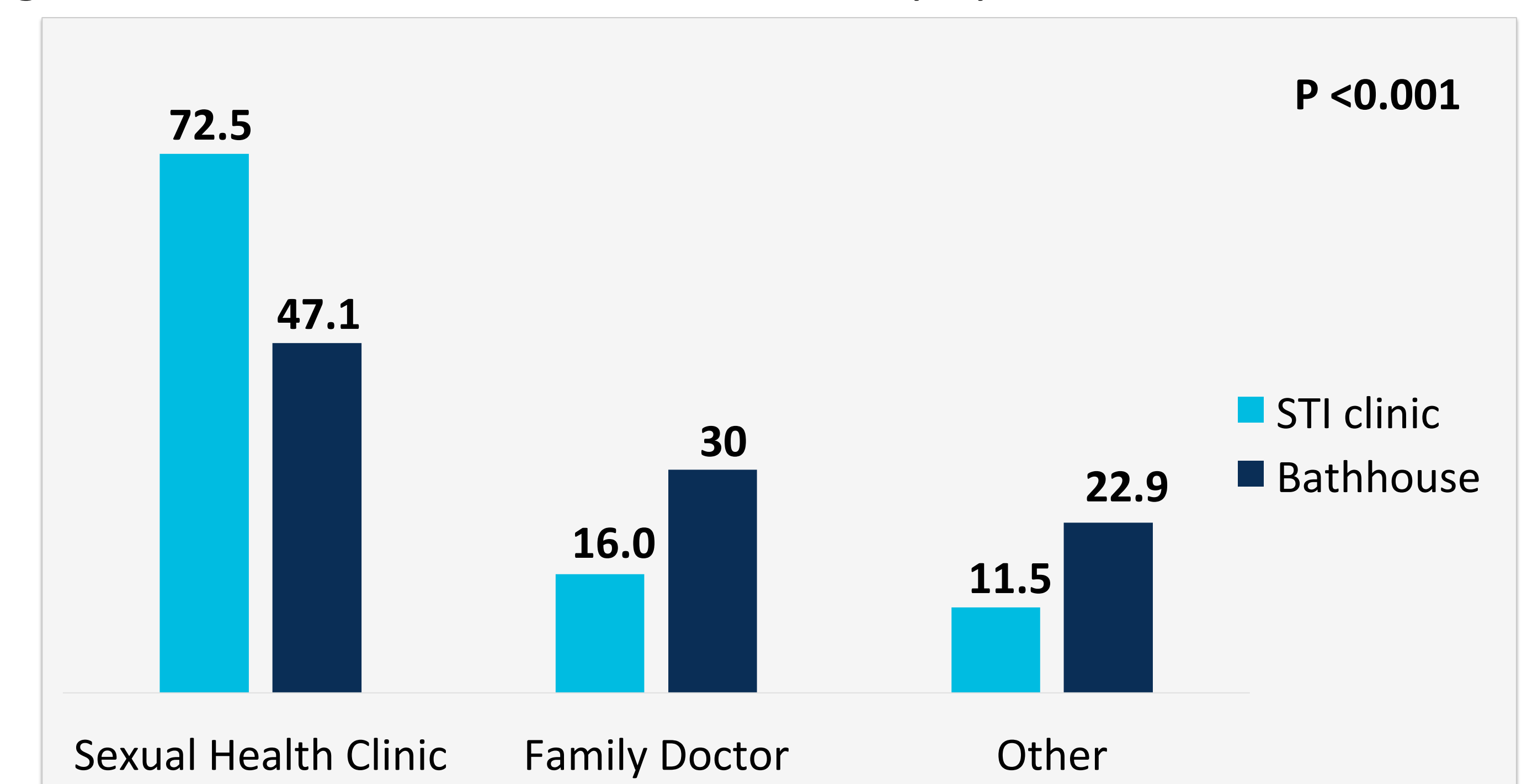
Table 1 Respondent demographics by location of recruitment

Characteristic	TOTAL N (%)	STI Clinic N (%)	Bathhouse N (%)	P-value
Sexual Orientation				
Gay	409 (80.0)	302 (82.3)	107 (74.3)	0.014
Bisexual	71 (13.9)	40 (10.9)	31 (21.5)	
Other	27 (5.3)	21 (5.7)	6 (4.2)	
Ethnicity				
White	255 (49.9)	190 (51.8)	65 (45.1)	0.247
Asian	140 (27.4)	98 (26.7)	42 (29.2)	
Other	116 (22.7)	79 (21.5)	37 (25.7)	
Educational Attainment				
High school or less	68 (13.3)	42 (11.4)	26 (18.1)	0.091
College/university	337 (66.0)	244 (66.5)	93 (64.6)	
Graduate degree	104 (20.4)	80 (21.8)	24 (16.7)	
Annual Income (\$CAD)				
≤\$20,000	80 (15.7)	56 (15.3)	24 (16.7)	0.801
\$20,001–40,000	123 (24.1)	92 (25.1)	31 (21.5)	
\$40,001–80,000	194 (38.0)	139 (37.9)	55 (38.2)	
>\$80,000	67 (13.1)	46 (12.5)	21 (14.6)	
Age				
<25	80 (15.7)	69 (18.8)	11 (7.6)	<0.001
25,45	352 (68.9)	257 (70.0)	95 (66.0)	
>45	79 (15.5)	41 (11.2)	38 (26.4)	
HIRI-MSM Score				
HIRI-MSM score <25	376 (73.6)	272 (74.1)	104 (72.2)	0.662
HIRI-MSM score ≥25	135 (26.4)	95 (25.9)	40 (27.8)	
Prior STI				
No	230 (45.0)	169 (46.1)	61 (42.4)	0.451
Yes	281 (55.0)	198 (54.0)	83 (57.6)	

Table 2 Awareness of PrEP by HIV risk category and location of recruitment

Characteristic	Aware of PrEP N (%)	Not aware of PrEP N (%)	P-value
HIRI-MSM Score			
HIRI-MSM score <25	303 (83.0)	62 (17.0)	0.025
HIRI-MSM score ≥25	122 (91.0)	12 (9.0)	
Location of Participant Recruitment			
STI clinic	304 (84.7)	55 (15.3)	0.621
Bathhouse	121 (86.4)	19 (13.6)	
Prior STI			
Yes	257 (92.4)	21 (7.6)	<0.001
No	168 (76.0)	53 (24.0)	

Figure 1 Preference for PrEP service delivery by location of recruitment



Results (continued)

- 83.4%** of respondents were aware of PrEP.
- Awareness was associated with HIRI score ≥25 (i.e., HIV risk) and prior STI in lifetime.
- 84.3%** of respondents would take PrEP if provided free of charge.
- 65.4%** of total respondents preferred to access PrEP through a sexual health clinic.
- Preference of PrEP service delivery was associated with location of participant recruitment.
 - Only 16% of respondents recruited at the STI clinic preferred to get PrEP from a family doctor

Discussion

- PrEP awareness was high among this high-risk sample of GBMSM (who were largely eligible for publicly funded PrEP), despite data collection occurring prior to the public program in BC.
- Willingness to use PrEP was very high among all respondents.
- The majority of respondents preferred to access PrEP through STI clinics, and was significantly associated with location of participant recruitment.
 - The clear preference to access PrEP through sexual health clinics necessitate increased support for PrEP delivery via sexual health clinics
 - These results suggest that sexual health clinics should extend services beyond episodic care and embrace a longitudinal model of service delivery that can accommodate assessment, provision and monitoring eligible individuals to maximize PrEP uptake
 - Effort should be made to address perceived or experienced barriers GBMSM may face accessing PrEP through family doctors, especially if STI clinics cannot accommodate PrEP