

The Pre-exposure Prophylaxis (PrEP) Cascade among Chinese Gay, Bisexual and Men Who Have Sex with Men (MSM) in Toronto

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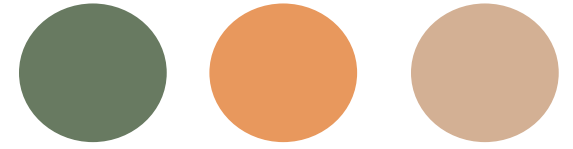
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Background & Methods



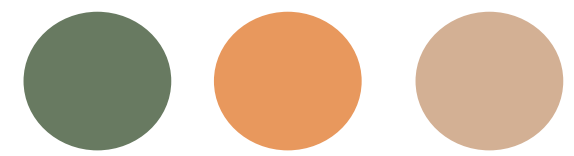
Background

- In Canada, gbMSM account for just over half of incident infections each year, and have a 131-fold higher risk of HIV acquisition than other Canadian men.
- Those of Chinese ancestry may face further risks related to
 - racism, immigration status, and other intersectional identities
- To better understand the potential impact of PrEP in Chinese MSM communities, we quantified an anticipated PrEP cascade in a community-based sample of Chinese MSM in Toronto.

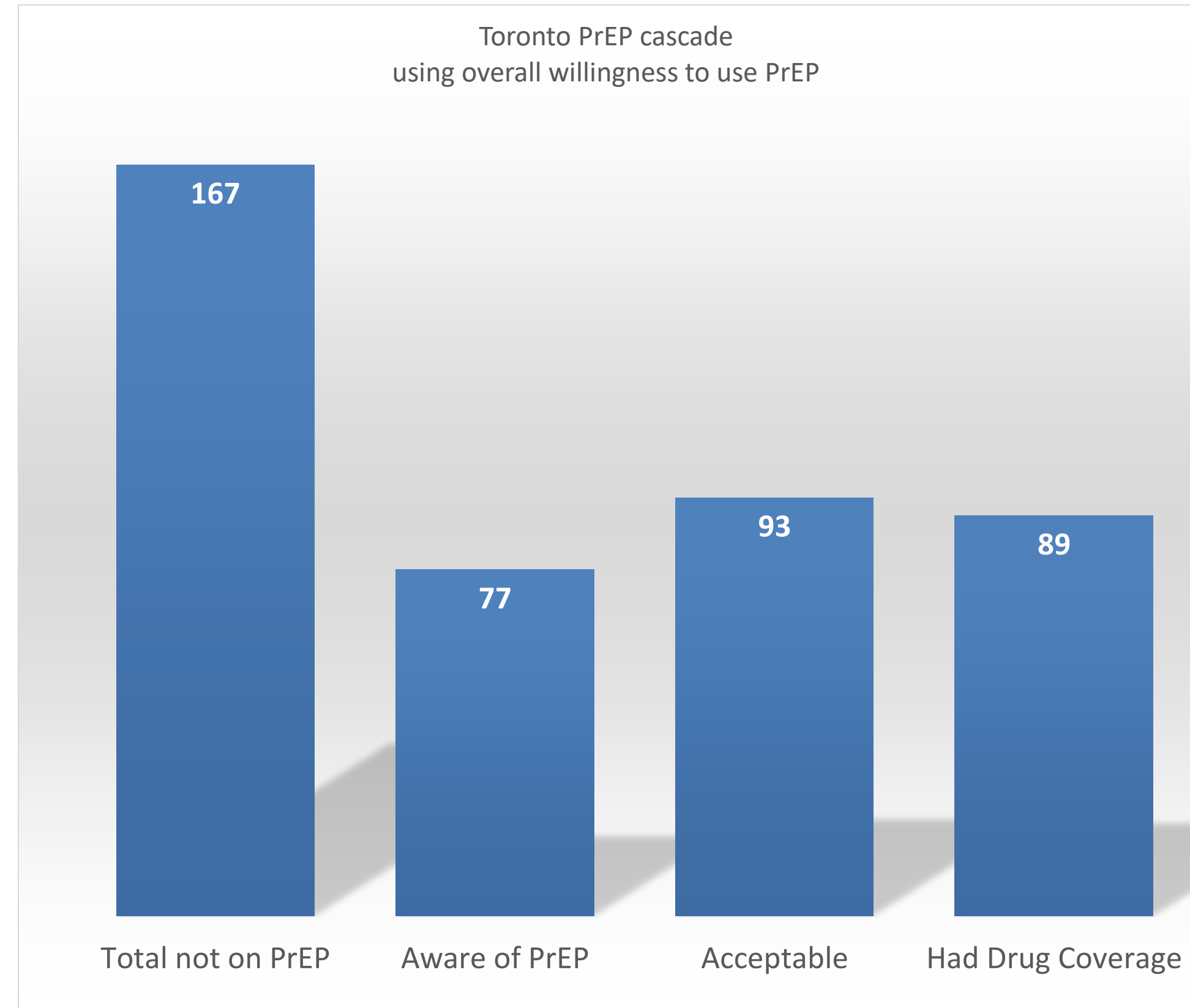
Methods

- Using convenience sampling, we recruited adult Chinese cis-gender gbMSM via social media and service agency during July 2019– December 2020 if they
 - had anal sex with men (past 6 months)
 - self-identified as HIV-negative or status-unknown
- We constructed a three-step anticipated PrEP cascade by sequentially quantifying respondents'
 - PrEP awareness, PrEP acceptability and drug coverage.
- Additional questions addressed barriers and facilitators of PrEP access.

Results-1



- Of 266 participants, 41.0% were born in Canada, 36.1% in Mainland China, and 12.8% in Hong Kong. Most had an undergraduate degree or more (89.1%) and full-time employment (64.7%), but only 41.7% had a family doctor. One third (37.2%) were taking PrEP.
- Of those not on PrEP (n=167), 119 (71.2%) met PrEP eligibility criteria based on self-reporting condomless anal sex, plus prior syphilis (n=4), rectal gonorrhea/chlamydia (n=21), a sexual partner with detectable viral load (n=32), HIRI-MSM score >10 (n=115), and/or using PEP more than once (n=18).
- Among eligible non-users of PrEP, 77 (67.7%) were aware of PrEP, 93 (55.6%) were willing to use PrEP, and 89 (74.8%) had any drug coverage. The anticipated cascade suggested that only 46 (27.5%) of PrEP-eligible respondents could likely access PrEP.

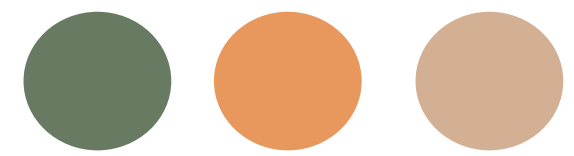


Results-2

Table 1. Factors associated with PrEP cascade among Chinese men who have sex with men in Toronto (P-value<.25)

	Total	PrEP awareness		PrEP acceptability		Drug coverage	
	N(col%)	OR (95% CI)	P-value	OR (95% CI)	P-value	OR (95% CI)	P- value
Socio-demographics							
Age							
Employment status							
Full time	113(67.7)	1.0	<.01				
Not-full time	54(32.3)	.32(.14,.73)					
Sexual risks							
Self-assessed risk of HIV							
No/low risk	109(65.3)	1.0	<.01			1.0	.22
Medium/high risk	58(34.7)	.18(.07,.43)				.43(.11,1.70)	
Concerns of taking PrEP							
If I were taking PrEP I would be comfortable telling my friends.							
Disagree	51(30.5)	1.0	<.01	1.0	.44		
Agree	116(69.5)	3.24(1.36,8.12)		1.56(.49,4.82)			
Condoms are the only truly effective form of HIV prevention.							
Disagree	67(40.1)	1.0	.02				
Agree	100(59.9)	.33(.13,.80)					
Socio-contextual factors							
Perceives PrEP to be commonly used in the Toronto Chinese-gay community							
Disagree	68(40.7)	1.0	.02				
Agree	99(59.3)	.39(.17,.87)					

Conclusions & Suggestions



Conclusions

- Many Chinese MSM in Toronto could benefit from PrEP, but there are gaps in PrEP awareness, acceptability, and drug coverage.
- Our findings suggest the need for tailored educational and social marketing efforts to prepare for the introduction of PrEP for Chinese gbMSM in Toronto.
- Participants who had medium/high risk reported lower levels of PrEP awareness.
- The associations of perceived community PrEP use and anticipated disclosure of PrEP use with PrEP awareness may reflect the collectivistic orientation of Chinese culture.

Suggestions

- Culturally competent, community-driven strategies for overcoming barriers to PrEP are needed for this population.
- Future research should keep exploring factors that associated with PrEP acceptability and drug coverage among Chinese gbMSM.

Limitation

- Cannot detect causal relationships, recall bias, social desirability, sampling bias