PARTNER NOTIFICATION FOR BACTERIAL STIs AMONG GAY, BISEXUAL AND OTHER MEN WHO HAVE SEX WITH MEN (GBM) IN MONTRÉAL, TORONTO AND VANCOUVER

Why did we research this topic?

- Partner notification is an effective mean of finding and treating people with sexually transmitted infections (STIs);
- It constitutes an essential element of public health prevention programs;
- Existing data on Canadian GBM partner notification experiences and associated factors are limited.

Gilles Lambert[1,2], Herak Apelian[1,3], Marc Messier-Peet[1,3], Daniel Grace[4], Trevor A. Hart[5], Nathan J.Lachowsky[6], David M. Moore[7], Jody Jollimore[8], Shayna Skakoon-Sparling[5], Syed W. Noor[5], Jordan Sang[7],Allan Lal[7], Abbie Parlette[5], Joseph Cox[1,3,9]

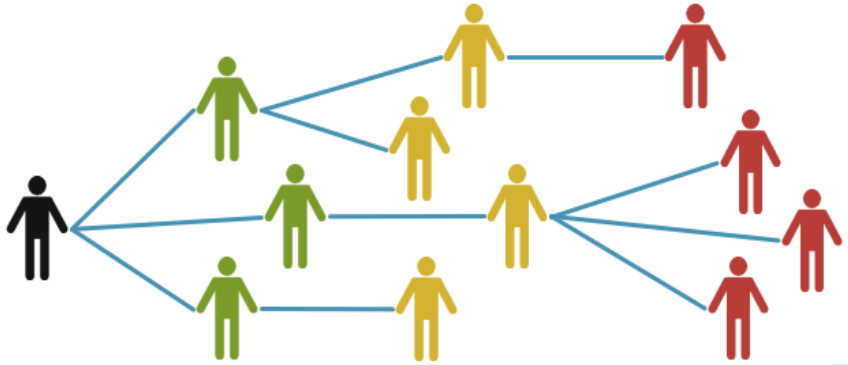
[1]Direction régionale de santé publique de Montréal, Montréal, QC, Canada, [2]Institut national de santé publique du Québec, Montréal, QC, Canada, [3]Research Institute-McGill University Health Centre, Montréal,QC, Canada, [4]University of Toronto, Toronto, ON, Canada, [5]Ryerson University, Toronto, ON, Canada, [6]University of Victoria, Victoria, BC, Canada, [7]British Columbia Centre for Excellence in HIV/AIDS, Vancouver,BC, Canada, [8]Community-Based Research Centre for Gay Men's Health, Vancouver, BC, Canada, [9]McGillUniversity, Montréal, QC, Canada

Conflict of Interest Disclosure : no conflicts of interest

For more information: gilles.lambert.ccsmtl@ssss.gouv.qc.ca

How did we research this?

- We used baseline data (collected 02-2017 to 08-2019) from the **Engage study**
- Through Respondent-Driven Sampling (**RDS**), Engage recruited gay, bisexual and other men who have sex with men (**GBM**), who are ≥16 years of age and sexually active in **Montreal**, **Toronto**, and **Vancouver.**



- Participants who reported having at least one bacterial sexually transmitted infection (either chlamydia, gonorrhea, syphilis or lymphogranuloma-venereum) diagnosis in the past 6 months were selected for the analytical sample.
- **Optimal partner notification** (OPN) was assessed using the following question :

Did you contact any recent sexual partners yourself to tell them to get tested or treated? By "recent sexual partners", we mean anyone you engaged in sexual activity with in the 2 months before you were told you had an STI.	
I contacted only my **main partner**	→ OPN (**if participant reported having only 1 sexual partner**)
I contacted less than half of my recent sexual partners	
I contacted **most** of my recent sexual partners	→ *OPN*
I contacted **all** of my recent sexual partners	→ OPN
No, I did not contact any recent sexual partners	

- Bivariate analyses stratified by city were conducted to identify potential correlates of OPN. Factors exhibiting similar relationships (i.e., direction of association) in each city were examined using multivariable logistic regression on pooled data. All analyses were RDS-adjusted

What did we learn?
1. Description of the partner notification experience of GBM

	Montreal	Toronto	Vancouver	
	RDS-a % (95% CI)	RDS-a % (95% CI)	RDS-a % (95% CI)	
Among all participants				
	(n=1179)	(n=517)	(n=753)	
Self-reported having received a bacterial STI diagnosis in the past 6 months	11.5 (8.3-14.7)	8.5 (4.9-12.1)	13.0 (9.4-16.7)	
Among participants who self-reported having received a bacterial STI diagnosis in the past 6 months				
	(167)	(81)	(116)	*p*
Encouraged by a healthcare provider to notify his partners	80.0 (69.4-90.7)	85.0 (69.8-100.0)	89.2 (77.4-100.0)	0.03
Healthcare/public health staff offered to notify their partners*	36.3 (23.2-49.4)	56.3 (38.2-74.4)	57.9 (41.5-74.3)	0.008
Among participants who self-reported a bacterial STI diagnosis and did not provide information to a healthcare provider to notify partners				
	(158)	(79)	(104)	
Optimal partner notification	61.7 (47.9-75.5)	62.1 (44.2-80.1	53.4 (35.9-70.9)	0.17

* 23 among 175 participants (13%) who received such an offer gave contact information to healthcare/public health staff for them to notify partners (provider-based notification)

What did we learn?
2. Factors associated with optimal partner notification

Among participants who reported a diagnosis of a bacterial STI in the past 6 months and did not provide any contact information for healthcare provider-based partner notification (n=341)

	Univariable Unadjusted OR (95% CI)	Multivariable Adjusted OR (95% CI)
Age (continuous)	1.00 (0.98- 1.02)	1.01 (0.98- 1.03)
Has a main partner for the past 6 months	2.84 (1.77 - 4.62)	**2.23 (1.34- 3.74)**
Number of sexual partners in the past 6 months (continuous)	0.99 (0.98- 1.00)	0.99 (0.98 -1.00)
Encouraged by a healthcare provider for him to notify his partners	3.03 (1.70- 5.51)	**2.81 (1.48-5.45)**

Factors exhibiting similar relationships in each city and associated with OPN at p<0.2 are presented. Other variables were considered in the analysis but were not significantly associated : **sociodemographic characteristics:** born or moved in Canada, education, income; **sexual behavioural** in the past 6 months: engaged in group sex, attended a bathhouse, engaged in 'chemsex'; **biological characteristics:** self-reported HIV status, nature of STI diagnosis in the past 6 months (chlamydia, gonococcal infection or syphilis), and **psychosocial characteristics:** symptoms of depression, symptoms of anxiety, problematic alcohol use, sexual altruism scale, collective self-esteem scale, experience of **ever been notified by a sexual partner**.

Participants who gave contact information to healthcare/public health staff for them to notify partners (23 out of 364 GBM) were excluded from this analysis.
Among the participants who reported having a main partner during the past 6 months, 78% had more than 1 partner during this period. Univariable regression analysis was conducted to identify potential correlates and multivariable logistic regression analysis using a quasi binomial distribution was conducted on significant correlates (p<0.2). The final model was adjusted for city.

What are the implications of these findings?

1. A small proportion of participants offered provider-base partner notification did give contact information to health care/public health staff ;
2. Optimal partner notification through patient-based partner notification for bacterial STIs was reported by 50 to 60 % of GBM across the three cities;
3. Encouragement from health professionals appears to be an important factor in level of patient-based partner notification achievement;
4. GBM who do not have a main sexual partner may need additional support.

Limitations

Representativity of a sample obtained through RDS, Cross sectional study design (causality); Social desirability.

Acknowledgements

We would like to thank all participants, our community, public health and academic partners and our funders (https://www.engage-men.ca/)