# Recreational Sports League Participation and Impacts Among Gay, Bisexual, and Other Men Who Have Sex With Men in Metro Vancouver

Lachowsky NJ<sup>1,2</sup>, Wells GA<sup>3</sup>, Jollimore J<sup>4</sup>, Pan S<sup>2</sup>, Barath J<sup>2</sup>, Armstrong HL<sup>2,5</sup>, Olarewaju G<sup>2</sup>, Roth EA<sup>1</sup>, Moore DM<sup>2,5</sup>, Hogg RS <sup>2,6</sup>

1. University of Victoria, Victoria, BC, 2. British Columbia Centre for Excellence in HIV/AIDS, Vancouver, BC, 3. AIDS Committee of Toronto, Toronto, ON, 4. Community-Based Research Centre Society, Vancouver, BC, 5. University of British Columbia, Vancouver, BC, 6. Simon Fraser University, Burnaby, BC

## Background

- Recreational sport leagues by and for marginalized sexual and gender communities may be an untapped resource for intervention to improve community health.
- Little research that has been done on the role that gay-specific recreational sports might play in gay men's health.
- We sought to examine the prevalence and correlates of gay sports league participation among gay, bisexual, and other men who have sex with men (GBM) in Metro Vancouver.

#### Methods

- Prospective cohort data were collected from 02/2012-07/2018 from sexually-active Metro Vancouver GBM recruited using respondent-driven sampling (RDS).
- Every six months participants completed study visits, including self-completed surveys with questions on gay community involvement, social support (i.e. Lubben Social Network Scale), and gay sport league participation in the past 6 months.
- We used three-level mixed effects models (RDS recruitment chain; participant; visit) to conduct multivariable logistic regression to evaluate factors associated with playing in a gay sports league.

## Results

- Of 774 participants, approximately 1 in 10 GBM (10.8%) participated in gay sports leagues in any given study period. Sports participation did not change over the study period (p=0.902).
- In univariable analyses:
  - playing sports was less likely among GBM who were HIV-positive (OR=0.59, 95%CI:0.35-0.98), Indigenous (OR=0.28, 95%CI:0.09-0.90), or lived outside Vancouver (OR=0.39, 95%CI:0.22-0.69).
  - Players were also more likely to have talked with friends or sex partners about PrEP in the past 6 months than those who did not participate in recreational sports (OR=1.42, 95%CI:0.93-2.17),
  - Playing sports was not associated with sexual identity (p=0.750) or being "out" (p=0.937).
- The multivariable model is presented in Table 1. In multivariable analysis:
  - Sport players were more likely to be <30 years versus 45+ (AOR=2.56, 95%CI:1.44-4.57), report \$60,000+ versus <\$30,000 annual income (AOR=2.16, 95%CI:1.21-3.85), report higher levels of social support (AOR=1.08, 95%CI:1.01-1.14), attend gay bars/clubs at least monthly versus not (AOR=3.87, 95%CI:2.07-7.23), and attend gay groups/ meetings at least monthly versus not (AOR=3.38, 95%CI:2.06-5.54);
  - sport players were less likely to report always using condoms (AOR=0.39, 95%CI:0.22-0.69), and did not report different levels of other seroadaptive prevention practices (all p>0.05).
- Men who had stopped playing sports over the course of the study reported lower Emotional and Social Loneliness subscale scores (OR= 0.96, 95%CI: 0.81-1.14 and OR=0.88, 95%CI= 0.75-1.04, respectively).

Table 1. Gay sports participation among GBM in Vancouver						
		Median	Q1-Q3	AOR	95%	6 CI
Lubben Social Network Scale		12.0	9-14	1.08	1.01	1.14
		n	%	AOR	95%	6 CI
Age:	under 30	37	41.1	Ref		
	30 to 44	36	40.0	0.67	0.41	1.11
	45 and over	17	18.9	0.39	0.22	0.69
Income (annual CAD): <\$30,000		44	48.9	Ref		
	\$30,000-\$59,999	29	32.2	2.00	1.30	3.08
	\$60,000+	17	18.9	2.16	1.21	3.85
Always	use condoms	58	64.4	0.39	0.22	0.69
Recent	bar/club attendance					
	Not in the past 6 months	5	5.6	Ref		
	Less than once per month	17	18.9	2.69	1.50	4.84
	About once per month	19	21.1	3.57	1.88	6.77
	More than once per month	49	54.4	3.87	2.07	7.23
Recent gay groups participation						
	Not in the past 6 months	33	36.7	Ref		
	Less than once per month	22	24.4	2.65	1.78	3.95
	About once per month	11	12.2	1.29	0.72	2.30
	More than once per month	24	26.7	3.38	2.06	5.54
Gay cor	nmunity is important to who I am					
	Strongly agree	27	30.0	Ref		
	Agree	48	53.3	0.81	0.50	1.30
	Disagree	11	12.2	0.46	0.25	0.86
	Strongly disagree	4	4.4	0.53	0.22	1.26
Being in the gay community is not good for		me				
	Strongly disagree	51	56.7	Ref		
	Disagree	32	35.6	0.74	0.50	1.11
	Agree	6	6.7	0.99	0.53	1.86
	Strongly agree	1	1.1	0.03	0.01	0.24

## Discussion

- Other popular sites of gay community (bars, nightclubs, bathhouses, etc.) are often utilized for community health outreach. As sports players were less likely to report always using condoms, this may provide another space in which to discuss gay men's health.
- Gay specific recreational sports participants being more likely to not use condoms with all sexual partners may be explained by PrEP. Athletes were more likely to have engaged in conversations about PrEP and had higher incomes. We should explore whether their knowledge of and increased access to PrEP may explain less pressure to use condoms with all sexual partners.
- Further exploration around social connection is warranted; there was no change in loneliness when men joined sports leagues, but changes after having left sports suggests recreational leagues may play an insulating role, positively impacting GBM's mental health and wellbeing.



















