

Differential patterns of sexual violence among men who have sex with men (MSM) versus injection drug using (IDU) men

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Objective

To describe outcomes associated with experiencing sexual violence at different ages among two populations of men at risk for HIV.

Methods

Data Source

Sexual minority data was obtained through the Vanguard Project, a prospective cohort of young gay and bisexual men in the Greater Vancouver area. Data for this cohort was obtained from the 1999/2000 self-administered survey.

Injection drug user data was drawn from the Vancouver Injection Drug Users Study (VIDUS), a cohort of injection drug users in the Greater Vancouver area. Data used for this analysis was taken from the interviewer-administered baseline questionnaire.

Sexual violence was defined identically in both cohorts:

“Any type of sexual activity that you were forced or coerced into against your will (including child sexual abuse, molestation, rape, and sexual assault).”

Analysis

Age-specific analyses based on self-reported age at first incident were constructed as:

- child sexual abuse (CSA) (aged less than 13 years)
- adolescence (aged between 13 and 17)
- adulthood (aged 18 years or more).

The data was stratified by cohort.

Multivariate logistic regression was used to determine the magnitude of effect of sexual violence ever and in each age category on each outcome by entering into each model the age category of first sexual violence (and ever experiencing sexual violence) and all fixed sociodemographics (i.e. ethnicity and age and education baseline). The reference category for all regression analyses was never having experienced any sexual violence.

Results

- A total of 1,430 men were eligible for analysis including 498 men in Vanguard, and 932 men in VIDUS.
- Among Vanguard participants, 140 (28%) men have ever experienced any sexual violence, compared to 173 (19%) in VIDUS (p<0.001).
- Table 1 summarizes sociodemographic characteristics among each cohort associated with ever experiencing any sexual violence.
- Table 2 summarizes the ages at first sexual violence of both Vanguard and VIDUS participants. The median age of onset of abuse was significantly lower among VIDUS men compared to Vanguard men (10 years vs. 12 years, p<0.001).
- Table 3 summarizes the unadjusted and adjusted logistic regression analyses of the relationship between sexual violence and health risk behaviors.

Table 1: Sociodemographic characteristics associated with ever experiencing any sexual violence

	Vanguard (n=498)			VIDUS (n=932)		
	Yes n, (%)	No n, (%)	p-value	Yes n, (%)	No n, (%)	p-value
Aboriginal						
Yes	17 (13%)	21 (6%)		118 (68%)	541 (71%)	
No	114 (87%)	330 (94%)	0.01	55 (32%)	218 (29%)	0.46
More than high school education						
Yes	109 (80%)	302 (86%)		43 (25%)	125 (17%)	
No	16 (20%)	49 (14%)	0.08	130 (75%)	634 (83%)	0.01
Stable Housing						
Yes	121 (88%)	317 (89%)		152 (88%)	601 (79%)	
No	16 (12%)	39 (11%)	0.82	21 (12%)	158 (21%)	0.01
Income less than \$10K/year						
Yes	7 (7%)	18 (7%)		9 (5%)	59 (8%)	
No	97 (93%)	228 (93%)	0.85	164 (95%)	700 (92%)	0.33
Age at baseline (median, IQR)						
	29 (25, 32)	28 (24, 31)	0.17	35 (29, 40)	36 (28, 42)	0.52

Table 2: Prevalence of sexual violence among 498 MSM and 932 IDU male participants in the Vanguard Project (Vanguard) and Vancouver Injection Drug Users Study (VIDUS) respectively

	Vanguard n, (%)	VIDUS n, (%)
First Incident		
12 years and under	65 (46%)	113 (65%)
13 – 17 years	23 (16%)	32 (19%)
18 years and over	34 (24%)	17 (10%)
Age not stated	18 (13%)	11 (6%)
All ages	140 (28%)	173 (19%)
Median Age at Onset (IQR)	12 (8 – 18)	10 (6 – 15)
Ever Received Counseling	35 (25%)	45 (5%)

Table 3: Unadjusted and adjusted analyses of relationship between sexual violence and health risk behaviors among 498 MSM and 932 IDU male participants in the Vanguard Project (Vanguard) and Vancouver Injection Drug Users Study (VIDUS) respectively

	Vanguard		VIDUS	
	Unadjusted Odds Ratio, (95% CI)	Adjusted* Odds Ratio, (95% CI)	Unadjusted Odds Ratio, (95% CI)	Adjusted* Odds Ratio, (95% CI)
Sex trade ever				
Ever	2.1 (1.4, 3.2)	2.0 (1.2, 3.2)	4.5 (3.1, 6.6)	4.6 (3.1, 6.8)
<12 years	2.5 (1.4, 4.2)	2.1 (1.1, 3.9)	4.2 (2.7, 6.7)	4.3 (2.7, 6.9)
13-17 years	2.5 (1.1, 5.9)	2.0 (0.7, 5.6)	3.8 (1.7, 8.5)	4.0 (1.8, 9.0)
18+ years	1.2 (0.5, 2.5)	1.5 (0.6, 3.5)	19.5 (2.7, 143.1)	19.3 (2.6, 141.6)
Ever attempted suicide				
Ever	3.6 (2.3, 5.6)	3.3 (2.0, 5.3)	1.5 (0.98, 2.2)	1.6 (1.0, 2.4)
<12 years	4.4 (2.5, 7.7)	3.7 (2.0, 6.9)	1.3 (0.78, 2.1)	1.4 (0.82, 2.2)
13-17 years	3.3 (1.4, 8.0)	2.6 (0.9, 7.1)	2.6 (1.2, 5.6)	3.1 (1.8, 5.4)
18+ years	2.5 (1.1, 5.3)	3.1 (1.3, 7.1)	1.1 (0.31, 4.9)	1.0 (0.29, 3.7)
Diagnosed mood disorder (Vanguard) or mental illness (VIDUS)				
Ever	2.3 (1.5, 3.5)	2.3 (1.4, 3.5)	1.9 (1.4, 2.7)	2.1 (1.5, 2.9)
<12 years	2.8 (1.6, 4.9)	2.6 (1.5, 4.7)	1.8 (1.2, 2.7)	1.9 (1.3, 2.9)
13-17 years	2.3 (0.9, 5.6)	2.4 (0.9, 6.3)	1.7 (0.9, 3.5)	1.8 (0.8, 3.7)
18+ years	2.6 (1.3, 5.4)	2.5 (1.2, 5.3)	2.2 (0.8, 5.8)	2.3 (0.8, 6.2)
Alcohol Use: >10 drinks per week (Vanguard) or bingeing (VIDUS)				
Ever	1.0 (0.6, 1.9)	1.0 (0.6, 1.9)	1.6 (1.2, 2.3)	1.7 (1.2, 2.4)
<12 years	1.2 (0.6, 2.5)	1.1 (0.5, 2.4)	2.1 (1.4, 3.1)	2.2 (1.4, 3.3)
13-17 years	1.0 (0.3, 3.6)	1.2 (0.3, 4.3)	1.7 (0.8, 3.4)	1.4 (1.0, 2.1)
18+ years	0.8 (0.3, 2.5)	1.0 (0.3, 3.2)	0.6 (0.9, 2.9)	0.6 (0.2, 1.7)
Sex with (Vanguard) or Borrow Needles from (VIDUS) HIV-positive person				
Ever	1.3 (0.8, 2.1)	1.3 (0.8, 2.2)	1.5 (0.9, 2.4)	1.6 (1.0, 2.6)
<12 years	1.2 (0.6, 2.3)	1.2 (0.6, 2.4)	1.7 (0.9, 2.9)	1.8 (1.0, 3.2)
13-17 years	1.0 (0.3, 3.1)	1.4 (0.4, 4.5)	0.9 (0.3, 3.1)	1.0 (0.3, 3.5)
18+ years	1.3 (0.5, 3.0)	1.2 (0.5, 2.9)	2.7 (0.9, 8.6)	2.8 (0.9, 9.0)
Lifetime number of sexual partners (>19)				
Ever	1.2 (0.7, 1.8)	1.1 (1.0, 1.2)	1.0 (0.72, 1.5)	1.0 (0.70, 1.5)
<12 years	0.9 (0.5, 1.7)	0.8 (0.4, 1.5)	1.0 (0.67, 1.6)	1.0 (0.66, 1.6)
13-17 years	1.4 (0.5, 3.9)	1.7 (0.5, 5.6)	1.0 (0.47, 2.3)	1.0 (0.45, 2.2)
18+ years	1.4 (0.6, 3.2)	1.3 (0.5, 3.2)	1.4 (0.52, 3.9)	1.5 (0.54, 4.1)
Ever accidentally overdosed				
Ever	—	—	1.7 (1.2, 2.4)	1.7 (1.2, 2.4)
<12 years	—	—	1.9 (1.3, 2.8)	1.9 (1.3, 2.9)
13-17 years	—	—	1.3 (0.65, 2.7)	1.3 (0.64, 2.7)
18+ years	—	—	1.5 (0.56, 3.9)	1.5 (0.56, 4.0)
Casual unprotected receptive anal intercourse				
Ever	1.8 (1.1, 2.9)	1.8 (1.1, 3.1)	—	—
<12 years	1.5 (0.8, 3.0)	1.7 (0.8, 3.4)	—	—
13-17 years	1.9 (0.7, 5.4)	1.6 (0.5, 5.2)	—	—
18+ years	2.5 (1.1, 5.6)	2.4 (1.0, 5.6)	—	—
Casual unprotected insertive anal intercourse				
Ever	1.7 (1.1, 2.7)	1.6 (1.1, 2.7)	—	—
<12 years	1.4 (0.8, 2.6)	1.5 (0.8, 2.7)	—	—
13-17 years	2.0 (0.7, 5.0)	1.8 (0.6, 5.1)	—	—
18+ years	2.4 (1.2, 5.1)	2.0 (0.9, 4.3)	—	—
Ever injected drugs				
Ever	1.2 (0.7, 2.1)	0.9 (0.5, 1.7)	—	—
<12 years	1.1 (0.5, 2.3)	0.8 (0.3, 1.7)	—	—
13-17 years	2.6 (1.0, 6.7)	1.4 (0.4, 4.6)	—	—
18+ years	0.6 (0.2, 2.0)	0.9 (0.2, 3.2)	—	—

*Adjusted analyses control for gender, ethnicity, and age and education level at baseline.

Summary & Implications

- Our data suggest that sexual minority men appear to have an overall higher prevalence of sexual violence in their lifetimes (28%), compared to injection drug using men (19%).
- The prevalence of child sexual abuse appears to be roughly equivalent between the two groups (12 - 13%).
- The increased violence among sexual minority men appears to be occurring during adulthood.
- Injection drug using males appear to be significantly younger at onset of abuse compared to men who have sex with men.
- Both groups of men experience a number of known HIV and other health risk factors, although there are a number of important differences that have important implications for HIV prevention and health promotion in general.