

Unprotected Anal Intercourse and recreational drug use among young MSM

Positioning and Partner type

Presented by Melanie Rusch



British Columbia
Centre *for* Excellence
in HIV/AIDS



THE
Vanguard
project



Providence
HEALTH CARE

Background

- Drug use patterns are complex
 - While widely studied, the literature reporting associations of recreational drug use and risky sexual practices among MSM populations has conflicting results and inconsistent methods
 - The influence of partner types and sexual roles on decision making has not typically been assessed

Drug Use Measures

- *Global* – any use of drugs, at any time
- *Sex-specific* – use of drugs during or around the time of sex
- *Event-specific* – drug use during a specific sexual encounter
(not collected in this study)

Objectives

- To see how the association of unprotected anal intercourse with use of specific drugs depends on
 - Drug use measure (global versus sex-specific)
 - Sexual role (insertive versus receptive)
 - Partner type (casual versus regular)

Study Population

- Vanguard cohort – open cohort of young MSM in Vancouver, BC
- Eligible participants were 16 to 35, not previously known to be HIV-1 positive and self-identified as bisexual, gay or having sex with other men
- As part of a larger study on drug use trends, a stable cohort of HIV negative participants was selected

Methods

- Odds ratios were estimated with logistic regression models and generalized estimating equation was used to account for repeated visits
- Models examined
 - Global versus Sex-specific drug use
 - Outcome stratified by
 - Sexual role
 - Partner-type

Table 1: Baseline characteristics of 261 young gay men in Vancouver, British Columbia

Characteristic	Median (IQR)
Age	27 (24-30)
	N (%)
Ethnicity	
White	197 (77)
Other	46 (18)
First Nations	14 (5)
Stable housing	255 (99)

Table 1: Baseline characteristics of 261 young gay men in Vancouver, British Columbia

Characteristic	N (%)
Employment	234 (90)
Income >10K	221 (84)

Table 2: Substance use among 261 young MSM in Vancouver, BC, at last study visit in 2001/2002

Sex-specific Use		Global Use
Drug	Proportion N(%)	Proportion N (%)
Alcohol	139 (54)	239 (92)
Poppers	45 (18)	69 (27)
Marijuana	56 (22)	132 (51)
Coke	18 (7)	48 (19)

Table 2: Substance use among 261 young MSM in Vancouver, BC, at last study visit in 2001/2002

	Sex-specific Use	Global Use
Drug	Proportion N(%)	Proportion N (%)
Crystal Meth	10 (4)	29 (11)
Ecstasy	13 (5)	48 (18)
GHB	8 (3)	26 (10)
Special K	4 (1.5)	29 (11)

Table 3: Association of drug use with any unprotected anal intercourse (UAI)

Drug Use:	Sex-specific	Global
Alcohol	1.93 (1.08-3.47)	1.57 (0.90-2.72)
Marijuana	1.43 (0.99-2.07)	1.64 (1.22-2.22)
Crystal Meth	1.75 (1.00-3.05)	1.56 (1.02-2.38)
Ecstasy	1.88 (1.20-2.95)	1.57 (1.12-2.19)
GHB	1.98 (1.01-3.87)	1.43 (0.85-2.43)
Special K	2.17 (1.08-4.33)	1.80 (1.06-3.08)

Table 4: Association of *sex-specific* drug use with UAI, stratified by role (insertive versus receptive)

Drug Use:	Insertive	Receptive
Alcohol	1.77 (0.98-3.21)	1.83 (1.00-3.34)
Crystal Meth	1.26 (0.76-2.10)	1.74 (1.05-2.91)
Ecstasy	1.53 (1.01-2.33)	1.85 (1.22-2.79)
GHB	2.14 (1.13-4.03)	1.43 (0.80-2.54)
Special K	2.05 (1.09-3.87)	1.63 (0.90-2.95)

Table 5: Association of *sex-specific* drug use with UAI, stratified by partner (regular versus casual)

Drug Use:	Regular	Casual
Poppers	0.70 (0.49-1.01)	1.79 (1.25-2.56)
GHB	2.62 (1.16-5.93)	1.42 (0.74-2.70)
Special K	2.87 (1.20-6.85)	1.39 (0.73-2.64)

Table 6: Association of drug use with partner and role specific UAI

Drug Use:	Sex-specific	Global
Crystal Meth	URAI with casual partner	--
Ecstasy	--	URAI with casual partner
GHB	UIAI with regular partner	--
Special K	UIAI with regular partner	--

Limitations

- Specific associations seen here are exploratory and should be viewed as hypothesis-generating
 - Multiple comparisons
 - Sex situation-specific, but still not specific to partner type or position

Conclusions

- Sexual use of drugs was reported by approximately $\frac{1}{3}$ those reporting any use of drugs; therefore misclassification is a concern
- Associations of specific drugs with UAI does depend on
 - drug use measurement
 - sexual role
 - partner type
- Context is important!

Recommendations

- Future studies should consider the contexts of drug use and employ situation-specific drug use measures

Acknowledgements

- Co-authors:
 - Dr. Thomas Lampinen
 - Arn Schilder
 - Dr. Robert Hogg
- The authors are indebted to all of the men participating in the Vanguard Project and to study team members, with specific thanks to:
 - Mary Lou Miller
 - Keith Chan
 - Kevin Craib
 - Peter Vann
 - Bonnie Devlin
 - Chondra Lips
 - Tony Rees
 - Steffanie Strathdee
- The authors are supported by individual awards from the Michael Smith Foundation for Health Research (MSFHR)