

Similar Sexual Behaviors With Casual Partners Among Gay Men With and Without a Regular Partner

LAURA M. KUYPER, BA,* THOMAS M. LAMPINEN, PhD,**† KEITH CHAN, MSc,* MARY LOU MILLER, RN,*
ARN SCHILDER,* AND ROBERT S. HOGG, PhD*†

Objectives: We hypothesized that men in a relationship would engage in less risky sexual activity with their casual partners compared to men with only casual partners.

Study: Cross-sectional data were collected between 1999 and 2003 in a study of young human immunodeficiency virus–seronegative gay men in Vancouver, British Columbia. We assessed the substance use and sexual behaviors of 156 men and compared those having casual partners in addition to 1 regular partner for the duration of the previous year ($n = 43$) to those reporting only casual partners during the previous year ($n = 113$).

Results: Men with just 1 regular partner were not significantly different from men without a regular partner with regard to sexual behaviors reportedly engaged in with casual partners, self-reported sexually transmitted infections diagnosed within the previous year, or demographic characteristics. Only previous use of poppers and higher frequencies of marijuana use were found among men without a regular partner.

Conclusions: In our cohort, young gay men in a relationship do not appear less likely to engage in risky sex with casual partners than men with casual partners only.

IT IS WELL ESTABLISHED that gay men are more likely to engage in unprotected anal intercourse (UAI) with their regular partners than with casual partners.^{1,2} Some men in relationships have UAI with their casual partners, which may lead to acquisition of human immunodeficiency virus (HIV) and other sexually transmitted infections and subsequent transmission to their regular partner.^{3,4} This risk of transmission may be greatest during the acute phase of HIV disease, immediately following seroconversion.⁵ Two very recent studies suggest that many men attempt to reduce this risk of transmission through “strategic positioning,”⁶ whereby men may engage in insertive rather than receptive UAI with casual partners.⁷ Insertive UAI may be less likely to result in HIV acquisition.⁸

Few studies have directly compared sexual behaviors with casual partners reported by men in relationships with those reported by men who have only casual partners over an extended period of time.^{2,9,10} We measured sexual behaviors engaged in with casual partners by men in and out of relationships to test the hypothesis that men in relationships engage in less risky sexual behaviors with

From the *British Columbia Centre for Excellence in HIV/AIDS, St. Paul’s Hospital, Vancouver, Canada; and the †Department of Health Care and Epidemiology, University of British Columbia, Vancouver, Canada

their casual partners than men who report having only casual partners during the previous year. Our interest in sexual behaviors with casual partners stems from our recent finding that unprotected receptive anal intercourse with such partners was strongly and independently associated with HIV seroconversion (adjusted relative risk = 4.9; 95% confidence interval 2.3–1.03).¹¹ We further tested the hypothesis that among men in a relationship, sexual behaviors with their regular partner predicted behaviors engaged in with casual partners.

Methods

The Vanguard Project is a prospective cohort study of young community-recruited men who have sex with men (MSM).¹² Eligible participants are between 15 and 30 years of age, live in greater Vancouver, have never previously tested HIV-positive, and self-identify as gay or bisexual or as having ever had sex with a human. At baseline and annually thereafter, subjects provide blood samples and complete self-administered questionnaires that elicit demographic information, as well as information pertaining to sexual and substance use behaviors.

The current study is restricted to the most recent questionnaire completed by each participant between 1999 and 2003, the period during which relationship-based questions were asked. Items pertaining to cohabitation with regular partners were asked in the 2001 to 2003 questionnaires only. We included HIV-negative men who reported having at least 1 casual partner and excluded those who reported any exchange of sex for money or drugs or injection drug use within the last year. “Casual” partner was defined in the questionnaire as “guys you had sex with less than once a month (including one night stands).” We defined for our analyses 2 groups, one of which included men who reported having only 1 regular partnership during the previous year that had lasted at least 1 year and the other of which included men who reported having no regular partners during the previous year. “Regular” partner was defined as “guys you have had sex with on a regular basis, at least once a month, during more than one of the last 12 months.”

We measured use during the previous year of alcohol, cigarettes, volatile nitrites (“poppers”), marijuana, cocaine, crack cocaine, acid (lysergic acid diethylamide), crystal methamphetamine, ecstasy, ketamine (special K), and γ -hydroxybutyrate (GHB). We

The authors are especially indebted to the Vanguard Project participants. We also thank Bonnie Devlin and Vanessa Volkommer for their expert administrative assistance. Drs Lampinen and Hogg are supported by the Michael Smith Foundation for Health Research.

Correspondence: Thomas M. Lampinen, PhD, BC Centre for Excellence in HIV/AIDS, 608-1081 Burrard Street, Vancouver, BC V6Z 1Y6, Canada. E-mail: tlampinen@cfenet.ubc.ca.

Received for publication July 28, 2004, and accepted September 9, 2004.

TABLE 1. Anal Intercourse Engaged in With Casual Partners, in Relation to Having 1 Regular Partner for the Duration of the Previous 12 Months

	One regular partner (n = 43), No. (%) [*]	No regular partner (n = 113), No. (%)	Age-adjusted odds ratio, No. (%) [†]	P value
Any receptive anal sex	21 (49)	61 (54)	0.8 (0.40–1.64)	0.56
Any unprotected receptive anal sex	6 (14)	20 (18)	0.8 (0.28–2.05)	0.58
Any insertive anal sex	23 (53)	78 (69)	0.5 (0.25–1.06)	0.07
Any unprotected insertive anal sex	13 (30)	32 (28)	1.1 (0.51–2.37)	0.81
Any insertive or receptive anal sex	29 (67)	89 (79)	0.6 (0.26–1.22)	0.14
Any unprotected insertive or receptive anal sex	15 (35)	37 (33)	1.1 (0.53–2.31)	0.80

^{*}Includes only men reporting at least 1-year duration of relationship.

[†]Estimated relative risk of engaging in sexual practice with casual partners among men with compared to men without a regular partner.

also examined self-reports of diagnoses during the previous year of syphilis, chlamydia, and gonorrhea, as well as sexual behaviors with casual partners and regular partners separately. We also measured depressive symptoms and self-esteem scores based on the abbreviated form of the Center for Epidemiologic Studies' Depression Scale¹³ and the Rosenberg Scale of Self-Esteem,¹⁴ respectively.

The comparison of men with and without a regular partner during the previous year was performed using Pearson χ^2 and Wilcoxon rank tests. Odds ratios computed using logistic regression were used to measure associations between having a regular partner and various sexual behaviors engaged in with casual partners. The same methods were used to measure the association between behaviors engaged in with casual and regular partners in an analysis restricted to men with a regular partner. Because some studies,^{15–18} although not all,^{19–21} suggest that UAI may be influenced by age and substance use, we adjusted odds ratios for age and evaluated potential confounding by substance use.

Results

Among the 156 eligible participants, the median age was 30 (interquartile range, 26–33), 109 (71%) were white, 151 (97%) had stable housing, 88 (61%) were college-educated, 90 (58%) were employed full-time, and 124 (89%) reported earning >\$10,000 (CDN); more than 90% of the study group self-identified as gay. Forty-three (28%) of the men reported having just 1 regular partner for at least 1 year, and 113 (72%) reported having no regular partners during the previous year. Among the 43 men having just 1 regular partner, 37 completed more detailed items

pertaining to their relationships; 30 (81%) reported living with this partner. The duration of regular partnerships was a median 3.5 (interquartile range, 1.5, 5.0) years.

Men with and without a regular partner did not significantly differ on scores of depression or self-esteem. Nor were they different in their reported substance use, with 2 exceptions. Poppers were less likely to be used in the past year by men with a regular partner ($P = 0.039$), and marijuana was used less frequently among these men ($P = 0.050$). Compared to the 113 men without a regular partner, men with a regular partner were more likely to report having engaged during the previous year in any unprotected anal intercourse (84% vs. 42%; $P < 0.01$), any unprotected receptive anal intercourse (72% vs. 33%; $P < 0.01$); and any unprotected insertive anal intercourse (72% vs. 41%; $P < 0.01$). Men with a regular partner tended to have fewer casual partners than men who did not have a regular partner (median 3 vs. 6; $P = 0.07$). However, with regard to sexual behaviors with casual partners, we observed no significant difference between the men with and without a regular partner (Table 1). These results were unaffected by adjustment for age or substance use. Additionally, self-reports of sexually transmitted infection diagnoses during the previous year did not differ between men with (2 [5%] of 43) and without (8 [7%] of 113) a regular partner ($P = 0.73$).

Finally, we wished to know if, among men with a regular partner, the behaviors they engaged in with that partner predicted behaviors engaged in with casual partners. Table 2 shows that, in general, there was a positive association between the behaviors engaged in with both regular and casual partners, with the exception of insertive anal intercourse. The odds ratios were not statistically significant, although this sample size was small.

TABLE 2. Odds Ratios for Engaging in Anal Intercourse With Casual Partners in Relation to Engaging in the Practice With a Regular Partner (n = 43 Men)

	Partners with whom behavior occurred during the previous 12 mo, No. (%)				Age-adjusted odds ratio (95% CI) [*]	P value
	Regular and casual partners	Regular partner only	Casual partner only	Neither regular nor casual partners		
Any receptive anal sex	19 (44)	17 (40)	2 (5)	5 (12)	2.4 (0.39–14.36)	0.35
Any unprotected receptive anal sex	4 (9)	25 (58)	2 (5)	12 (28)	1.3 (0.19–9.12)	0.79
Any insertive anal sex	18 (42)	17 (40)	5 (12)	3 (7)	0.6 (0.11–2.91)	0.50
Any unprotected insertive anal sex	10 (23)	18 (42)	3 (7)	12 (28)	2.4 (0.53–11.08)	0.25
Any anal sex	27 (63)	14 (33)	2 (5)	0 (0)	Undefined	0.97
Any unprotected anal sex	12 (28)	21 (49)	3 (7)	7 (16)	1.7 (0.32–8.60)	0.55

^{*}Estimated relative risk for engaging in the practice with casual partners among men who engaged in the practice with their one regular partner compared to men who did not engage in the practice with their one regular partner.

Discussion

Contrary to our expectations, in our cohort of community-recruited young MSM we observed no difference between men with and without a regular partner either in sexual behaviors they engaged in with casual partners or self-reported sexually transmitted infections. We also found that, in general, sexual behaviors engaged in with a regular partner were positively (albeit nonsignificantly) associated with behaviors engaged in with casual partners.

Our results are consistent with other studies that show that men in regular relationships have higher rates of UAI overall, compared to men with casual partners only.⁹ However, our results differ from the only other study we found that has so closely examined behaviors engaged in with casual partners, in relation to regular partnership status.² Elford and colleagues found that, compared to men currently in a relationship, men not currently in a relationship reported *higher* frequencies of UAI with casual partners.² The results of these studies could reflect differences in convenience sampling, in our respective definitions of casual and regular partnerships, or restriction of the present analyses to HIV-negative men. Alternatively, our findings could reflect an increase in UAI engaged in with casual partners that has occurred since 1997, when the data for the Elford study were collected. Indeed, significant increases in UAI with casual partners between 1997 and 2002, from 11% to 16% ($P = 0.01$) per year, have been observed in our cohort.²²

One limitation of our study is that we did not assess directly the affective component of “regular” partnerships. However, given the duration of these sexual relationships and frequency of cohabitation, it appears that most of the regular partnerships described by the young MSM in our report represent relatively stable relationships rather than merely sexual arrangements. Another limitation of our study is that we did not assess the perceived HIV status of either regular or casual partners, which precludes us from addressing the relevance of “negotiated safety” in relationships; items pertaining to the perceived HIV-1 serostatus of partners were recently added to our questionnaire. We may also not be able to generalize our findings to other gay men, particularly older or HIV-positive men. Our sample size was relatively small, which reduced statistical power of our analyses, and our reporting of sexually transmitted infections should be cautiously interpreted since the results were based on annual self-report only. Last, we did not assess relative frequencies of UAI with regular and casual partners.

In summary, sexual-risk behaviors engaged in with casual partners appeared in our cohort to be unrelated to being in a regular partnership. Since our data were collected subsequent to increases in UAI with casual partners reported in many other settings,^{23,24} our findings may indicate new norms in sexual-risk behavior among men in relationships who also have casual partners. Regular partnerships have been implicated as the primary source for HIV transmission in some studies^{3,4}; therefore, interventions specifically targeting men in relationships should address sexual-risk reduction with regular,²⁵ as well as casual, partners and promote safer norms.

References

- Davidovich U, de Wit JB, Stroebe W. Assessing sexual risk behaviour of young gay men in primary relationships: the incorporation of negotiated safety and negotiated safety compliance. *AIDS* 2000;14:701–706.
- Elford J, Bolding G, Maguire M, Sherr L. Sexual risk behaviour among gay men in a relationship. *AIDS* 1999;13:1407–1411.
- Davidovich U, de Wit J, Albrecht N, Geskus R, Stroebe W, Coutinho R. Increase in the share of steady partners as a source of HIV infection: a 17-year study of seroconversion among gay men. *AIDS* 2001;15:1303–1308.
- Xiridou M, Geskus R, De Wit J, Coutinho R, Kretzschmar M. The contribution of steady and casual partnerships to the incidence of HIV infection among homosexual men in Amsterdam. *AIDS* 2003;17:1029–1038.
- Xiridou M, Geskus R, de Wit J, Coutinho R, Kretzschmar M. Primary HIV infection as source of HIV transmission within steady and casual partnerships among homosexual men. *AIDS* 2004;18:1311–1320.
- Van de Ven P, Kippax S, Crawford J, et al. In a minority of gay men, sexual risk practice indicates strategic positioning for perceived risk reduction rather than unbridled sex. *AIDS Care* 2002;14:471–480.
- Choi KH, Han CS, Hudes ES, Kegeles S. Unprotected sex and associated risk factors among young Asian and Pacific Islander men who have sex with men. *AIDS Educ Prev* 2002;14:472–481.
- Vittinghoff E, Douglas J, Judson F, McKirnan D, MacQueen K, Buchbinder SP. Per-contact risk of human immunodeficiency virus transmission between male sexual partners. *Am J Epidemiol* 1999;150:306–311.
- Dawson JM, Fitzpatrick RM, Reeves G, et al. Awareness of sexual partners' HIV status as an influence upon high-risk sexual behaviour among gay men. *AIDS* 1994;8:837–841.
- Semple SJ, Patterson TL, Grant I. Partner type and sexual risk behavior among HIV positive gay and bisexual men: social cognitive correlates. *AIDS Educ Prev* 2000;12:340–356.
- Weber AE, Craib KJ, Chan K, et al. Determinants of HIV seroconversion in an era of increasing HIV infection among young gay and bisexual men. *AIDS* 2003;17:774–777.
- Strathdee SA, Hogg RS, Martindale SL, et al. Determinants of sexual risk-taking among young HIV-negative gay and bisexual men. *J Acquir Immun Defic Syndr Hum Retrovirol* 1998;19:61–66.
- Mirowsky J, Ross CE. Age and depression. *J Health Soc Behav* 1992;33:187–205.
- Silverstone PH, Salsali M. Low self-esteem and psychiatric patients, part I: the relationship between low self-esteem and psychiatric diagnosis. *Ann Gen Hosp Psychiatry* 2003;2:2.
- Ekstrand ML, Coates TJ. Maintenance of safer sexual behaviors and predictors of risky sex: the San Francisco Men's Health Study. *Am J Public Health* 1990;80:973–977.
- Paul JP, Stall RD, Crosby GM, Barrett DC, Midanik LT. Correlates of sexual risk-taking among gay male substance abusers. *Addiction* 1994;89:971–983.
- Kalichman SC, Kelly JA, Rompa D. Continued high-risk sex among HIV seropositive gay and bisexual men seeking HIV prevention services. *Health Psychol* 1997;16:369–373.
- Koblin BA, Chesney MA, Husnik MJ, et al. High-risk behaviors among men who have sex with men in 6 US cities: baseline data from the EXPLORE Study. *Am J Public Health* 2003;93:926–932.
- Craib KJ, Weber AC, Cornelisse PG, et al. Comparison of sexual behaviors, unprotected sex, and substance use between two independent cohorts of gay and bisexual men. *AIDS* 2000;14:303–311.
- Dufour A, Alary M, Otis J, et al. Correlates of risky behaviors among young and older men having sexual relations with men in Montreal, Quebec, Canada. Omega Study Group. *J Acquir Immun Defic Syndr* 2000;23:272–278.
- Hart GJ, Flowers P, Der GJ, Frankis JS. Homosexual men's HIV related sexual risk behaviour in Scotland. *Sex Transm Infect* 1999;75:242–246.
- Lampinen TM, Chan K, Craib KJP, et al. Trends in condom use and HIV-1 seroincidence in a cohort of young men who have sex with men (MSM) in Vancouver, 1997–2002. *Canadian J Infect Dis* 2003;14(suppl A):41A.
- Dodds JP, Nardone A, Mercey DE, Johnson AM. Increase in high risk sexual behaviour among homosexual men, London 1996–8: cross sectional, questionnaire study. *BMJ* 2000;320:1510–1511.
- Elford J, Bolding G, Sherr L. High-risk sexual behaviour increases among London gay men between 1998 and 2001: what is the role of HIV optimism? *AIDS* 2002;16:1537–1544.
- Davidovich U, de Wit JBF, Stroebe W. The effect of an Internet intervention for promoting safe sex between steady male partners—results and methodological implications of a longitudinal randomized controlled trial online: the XV International AIDS Conference, 2004 Abstract no. WePeC6115. *Med Gen Med* 2004;6:WePeC6115.