Abstract

In epidemiological studies that focus on gay men's sexual risk behaviour the context in which it occurs is often ignored. Increasingly, knowledge of the type and nature of the partnerships is seen to be important when assessing sexual risk behaviour. For this study, gay and bisexual men were recruited through community groups, gay bars and bathhouses to complete a questionnaire on sexual practices with primary and casual same-sex partners. Partnerships were grouped as primary (162%, n = 110), casual (40.0%, n = 187) and both primary and casual (162% n = 76). In these configurations 40.0%, 13.3% and 31.4% respectively reported at least one episode of unprotected sex in the previous three months. In the subgroup of men with both primary and casual partners a number varied their behaviour significantly with partner type. Most important, the pattern was for men to refrain from risky activities with their casual partners. However, for some men a reverse pattern of risk was reported. These findings emphasize that, for HIV education and prevention, there is a need to address the diversity of mens' relationships, to recognize the diversity of behaviour within relationships and to open discussion about the factors that influence condom use.

Key words

Gay men, Bisexual men, Sexual risk behavior, Partnership characteristics

Introduction

Understanding the evolution of the HIV/AIDS epidemic among gay and bisexual men requires greater knowledge of their sexual risk-taking behaviour and changes they have made to their behaviour. In view of the fact that a substantial number of men continue to report high risk sex, a more indepth understanding of the variation in behaviour and the broad determinants of that variation is essential (Haour-Knipe & Aggleton, 1998; International Summer Institute, 1997). Many examinations of individual and group determinants, have focussed on the biological and psychological aspects of risk behaviour (Misovich et al., 1997; Bastard and Cardia-Voneche, 1997a). Considerable emphasis has been placed on sociodemographic characteristics such as age, AIDS knowledge, substance use and peer group influences (Davies et al., 1992; Hays et al., 1997; Joseph et al., 1987a; Joseph et al., 1987b; Leigh & Stall, 1993). Understanding of these
factors has led researchers to focus on the social interactions and the context of sexual encounters (Bastard et al., 1997; Boulton, 1994; Gold, 1993; Schellenberg & Linnebach, 1998; Shedden, 1998). Increasingly, the role of relationship status as a determinant of sexual risk-taking is considered (Adam et al., 1998).

Over the past ten years, there has been extensive variation both in the terminology and operational definitions used to describe the sexual partnerships of gay and bisexual men (Misovich, Fisher, & Fisher, 1997). The literature refers both to type of partners and type of relationship. Reference has been made to regular and casual partnerships (Connell et al., 1989; Weatherburn et al., 1991), regular and nonregular partners (Fitzpatrick et al., 1990), steady and casual partners (Sasse et al., 1990 as cited by Pollack, 1994) and steady partners (i.e., those with lovers or intimate partners), friends (i.e., partners known well but who are not lovers or intimates) and casual or anonymous partners (McKirnan et al., 1995). Some of the early definitions included monogamous relationships, serial relationships, and relationship plus casual partners-where one or both of the partners in a relationship have casual sex; monogamous and non-monogamous relationships; exclusive, nonexclusive and both exclusive and non-exclusive; and monogamous versus non-exclusive or open (Connell et al., 1989; Fitzpatrick et al., 1990; Hickson et al., 1992; Weatherburn et al., 1991). A more detailed operational definition has been provided by Davies et al. (1993). This group described a regular partner as one with whom sex occurred more than once and where the second and subsequent meetings were not accidental and with whom there was an intention to have sex in the future. Here monogamy is not excluded. They further define casual partners as all those which fall outside of the definition of regular. In a casual relationship there may be an expression of interest in having sex in the future but with no formally stated execution plan.

In the reporting of patterns of relationships the literature shows wide variation and change in patterns over time. These variations may reflect different measures and operational definitions, sampling bias, the extensive variation found in gay men's relationships and the change in relationships over an individual's life course. Along with the attempt to classify and develop subtypes for "partnerships" and "relationships" there have been several attempts to define and characterize men who are involved or not involved in relationships, though there remains little definitive work in this area. Two associations commonly described are that men with casual partners are more likely to come from larger communities (Davies et al., 1993; Myers et al., 1993) and tend to be younger (Dawson et al., 1991; Fitzpatrick et al., 1990). More recently, Hoff et al. (1996) in a longitudinal study of gay-identified men in San Francisco found that HIV positive men were less likely to be in primary relationships and those in primary relationships were less likely to be monogamous.

These general analyses have been followed by more focussed analysis of partnerships in terms of gay men's casual partners (van de Ven et al., 1997; van de Ven et al., 1998) and regular
partners (Hays et al., 1997; Kippax et al., 1997; Wagner et al., 1998). Further, there has been interest in sero-discordant and concordant couples (Hoff et al., 1997; Remien et al., 1995). Increasingly, these studies have looked at the communication and negotiation involved in relationships between men. Misovich et al. (1997) outline some of the important psychological processes that appear to be associated with risky sexual behaviour in relationships and lay out a model for research and preventive education.

This paper classifies partnerships reported by a sample of gay and bisexual men, from one mid-sized Canadian city as primary, casual and both primary and casual, and describes the behaviours associated with each classification. It then concentrates on a subgroup analysis of men who have both casual and primary sexual partners. In this analysis attention is given to both a description of the range of behaviours with each type of partner as well as a description of the change (difference) in behaviour of individuals within the context of a given type of partnership.

**Method**

A convenience sample of gay and bisexual men was recruited for a combined community-based knowledge, attitude and behaviour survey and HIV prevalence study (the latter through collection of a saliva specimen). The city where the study was conducted was chosen because its gay community had many of the elements and structures of larger Canadian communities, but on a smaller scale that provided a manageable location to gather relevant data and to evaluate a number of recruitment strategies. Local coordination of a number of fieldwork elements was made possible through the assistance of the city's primary gay HIV outreach program. This program was associated with a community clinic known for its service to the gay HIV community. The study relied extensively on trained volunteers to assist in the setup and dissemination of the promotional campaign for the study and in data collection. Some aspects of this methodology were modeled on an earlier national study (Myers et al., 1993).

A phased recruitment of respondents was undertaken. Recruitment was initially conducted through twelve gay/lesbian and bisexual community groups. This procedure was selected to ensure that a core group in the community, many of whom might be considered leaders, had information about the study. Within the community groups it was possible to provide a detailed explanation of the study due to the relaxed meeting environment.

This initial recruitment phase was complimented by a second recruitment phase in gay-identified commercial venues including all of the local gay-identified bars (n = 4) and a bathhouse. In these venues recruitment was planned for designated time periods ensuring coverage of different times and days of the week. Trained volunteer recruiters systematically approached individuals during the designated time period to ask them to participate. Those who agreed were provided with a brief description of the study’s purpose and then were taken to a
quieter area of the premises to complete an anonymous questionnaire. Respondents were told not to put any identifying marks on the survey and to place it in an unmarked envelope. Respondents were paid five dollars for their participation.

Specific questions were asked regarding sexual behaviour (a range of 13 activities) with primary and/or casual sexual partners (defined by respondent) in the previous three months. A series of questions on history of relationships, such as number of monogamous relationships in a lifetime and length of relationship, provided some basis to compare respondent's current relationships with their broader pattern of partnerships.

Analysis

Respondents were classified into partnership configurations (primary partner only, casual partners only, and both casual and primary partners) and the characteristics of men in each configuration were compared. The sexual activities of individuals and their highest level of sexual risk were compared across the classifications using contingency table and chi-square statistics, and the examination of partitioned chi-squares to highlight significant differences. A risk-level variable was created by recoding the 13 sexual activities, reported in the three month time period, into a four category variable: no anal intercourse, protected anal intercourse only, both protected and unprotected anal intercourse and anal intercourse that was always unprotected. Data were not available to assess sero-concordance or discordance with either primary or casual partners.

A subgroup analysis was conducted for those men who reported both primary and casual partners. Using the McNemar Symmetry chi-square, differences were examined between individual men's sexual behaviour engaged in with their primary partners and the sexual behaviour that each engaged in with their casual sexual partners.

Results

Response

Overall, 577 men were approached to participate in the study. Approximately 5% refused to participate and 8% had previously participated. In addition, 33 men were removed because either they did not self-identify as gay or bisexual, were attracted only to women, or had never had sex with a man. Five hundred and one men agreed to answer the questionnaire with 429 (85.6%) also agreeing to provide a saliva specimen. The final N for this analysis is 468. Of this group 316 (67.5%) were recruited through bars, 107 (22.91/6) through community groups, and 45 (9.6%) through the bathhouse.
Socio-Demographic Characteristics of the Study Population

A higher proportion of younger men was recruited for this study (13.3% were under age 20) than in previous Canadian surveys of gay and bisexual men. Although the study included a number of youth and a number of male sex workers, they are referred to as men for the purposes of this paper (Allman, 1999). Men in the sample ranged in age from 15 to 72 with a median age of 30, and a mean age of 31.9 years (S.D. = 10.8). Forty-four percent of the study population reported annual incomes of less than $20,000. This high proportion of relatively low yearly incomes may reflect the age of the study population, the recruitment of some street youth, as well as and the economics and employment base of the community. The majority (71.8%) were employed, 10.9% were students, 8.8% unemployed or retired and 4.5% reported that they received disability benefits.

Men were classified by three partnership configurations based on the sexual activities reported with primary and casual sexual partners in the past three months: 40.0% (n = 187) of men were involved with casual sexual partners only, 23.5% (n = 110) with only primary partners, 16.2% (n = 76) with both primary and casual sexual partners, and 20.3% (n 98) indicated that they had no sexual partners in the past three months, and consequently are not included in the analysis of sexual behaviour by different partnership configurations.

Table I presents variables significantly associated with each partnership configuration. A higher proportion of men with only primary partners were recruited in bars and a lower proportion in the bathhouse than in any of the other partnership configurations. Conversely, a higher proportion of men with only casual partners were recruited from the bathhouse and a lower proportion from community groups ($X^2 = 31.13$, df = 6, p<0.001). Men who had sex with both primary and casual partners in the last three months were recruited in a lower proportion (63.2%) through bars than those with primary partners only (72.7%). In contrast, men with primary partners only were less likely to be recruited through the bathhouse (2.7%) than were men with both primary and casual partners (9.2%), who in turn were less likely to be recruited in the bathhouse than men with casual partners only (17.1%). Men with no sexual partners in the previous three months were the group with the highest proportion recruited through community groups.

Age was the only sociodemographic variable to be significantly associated with partnership configuration. Men with no partners in the last three months were the most likely to be age 20 or under; men with casual partners only were the group with the highest proportion of men over age 31 ($X^2 = 18.5$, df = 9, p<0.05). The two groups with primary partners only or with both primary and casual partners had the largest proportions of men who identified themselves as
gay; men with no partners or casual partnerships only were most likely to report that they were bisexual, heterosexual or other ($X^2 = 26.6, df = 6, p<0.001$).

The associations with reported alcohol use did not directly reflect recruitment in bars. Men with both primary and casual partners were most likely to report alcohol use in the last week, and those with no partners the lowest levels of alcohol use ($X^2 = 13.1, df = 3, p<0.005$). No significant differences were found with education level, first language spoken or income.

Table 2 presents summary statistics that characterize some aspects of the longer term partnership histories of men in the four partnership groups assigned based on sexual partnerships in the past three months. These statistics are based on the questions: "How many male sex partners have you had in the last year?"; "How many monogamous sexual relationships have you had with men in your lifetime?"; and "How many years did your longest (and shortest) monogamous relationship last?" The data for Table 2 were gathered to explore whether the current partnership configuration may reflect a broader pattern of one's lifetime mating pattern. Men who reported that they had a primary sexual partner only in the last three months also reported the least number of sexual partners in the last year. In addition, this group had a tendency to report a greater number of monogamous relationships in their lifetime. Men with both primary and casual sexual partnerships in the last three months indicated that they had had fewer lifetime monogamous relationships. As a group, the men who reported no sexual partners in the previous three months were the ones most likely to have had no sexual partners in the past year and to report the lowest average number of monogamous lifetime relationships. The differences between men who currently report both a primary and casual sexual partners and men who report only casual partners are minor. Somewhat confusing is the fact that men with both primary and casual sexual partners reported fewer monogamous relationships and also report a trend for relationships to last longer.

Sexual Activities and Partnership Configuration

Comparison of the occurrence of various sexual activities in the past three months by different partnership configurations is shown in Table 3. For this analysis a composite measure of sexual activity is described (i.e., respondent reported participation in the activity with only casual, only primary, or with both primary and casual partners). Significant differences between the partnership configurations were found for 9 of the 13 activities. In general, men who had both primary and casual partners reported engaging in the highest proportion of sexual activity(ies) with the exception of unprotected anal intercourse ("fucking") which was highest for those with a primary partner only. Those with only casual partners reported the lowest proportion of receptive and insertive anal intercourse without a condom in the previous three months. This group of men also were significantly less likely to report insertive analingus ("rimming") and receptive fellatio ("sucking") with transfer of semen.
Level of Sexual Risk and Partnership Configuration

Of those in the population who reported sexual activity in the previous three months, 61.8% reported anal sex, with 37.1% always using a condom for anal sex. Overall, 12.1% of the total study population reported receptive or insertive anal intercourse that was always unprotected and 12.6% reported anal intercourse that was sometimes protected and sometimes not, for a total of 24.7% reporting at least one episode of unprotected anal intercourse in the three months prior to data collection. Sexual risk by the partnership configuration is shown in Figure 1. Forty percent of men with only primary partners reported at least one episode of unprotected anal intercourse in the previous three months (29.5% reported unprotected anal intercourse plus 10.5% reported anal intercourse that was sometimes protected and sometimes unprotected). Among men with both primary and casual partners, this level of risk was reported by 31.6% (21.1% were sometimes unprotected plus 10.5% were always unprotected), and by 13.3% of men with casual partners only (9.4% were sometimes unprotected plus 3.9% were always unprotected).

Men with only primary partners and men with both primary and casual partners were the groups most likely to report anal intercourse in the last three months (76.3% and 73.3% respectively) compared to 49.4% for men with only casual partners. Men with only primary partners had the highest proportion of consistently protected anal intercourse (44.7% compared to 33.3% and 36.1% respectively). Men with casual partners only reported the highest proportion of non-anal sex (50.6%) and the lowest proportion of consistently unprotected anal intercourse (3.9%) \( (X^2 = 57.6, \text{ df} = 6, \text{ p}<0.001) \).

Subgroup Analysis - Men with Both Primary and Casual Partners \((N = 76)\)

A further analysis was undertaken to examine the sexual activities that the subgroup of men reporting both primary and casual partners \((n = 76)\) participated in with each respective partner type. The level of sexual risk engaged in with each type of partner is presented in Figure 2. A significantly greater proportion of men participated in unprotected anal sex with their primary partner than with their casual partner(s); 30.6% reported at least one episode of unprotected anal intercourse with their primary partners compared to 14.7% with their casual partners. The overall proportion reporting anal intercourse (protected or unprotected) was lower with casual than with primary partners (58.7% compared to 66.7%).

Differences in Individual's Behaviour with Primary versus Casual Partners

In addition to the group findings shown in Fig. 2, we also sought to determine the extent to which individuals differed in their behaviour with primary versus casual partners. Men who had both types of partners in the past three months \((n = 76)\) reported whether they had engaged or
had not engaged in various sexual practices with primary and casual partners. The percentage of individuals whose behaviour differed with primary versus casual partners ranged from 15.5% to 34.5% depending on the activity (Table 4, column 1). McNemar symmetry Chi-square analysis identified four differences in behaviour that were statistically significant. For example, 92.9% and 85.7% respectively engaged in receptive and insertive anal intercourse without a condom with primary partners, but did not do so with casual partners (Table 4, column 3). The difference in the percentage who had unprotected anal intercourse with primary but not with casual partners (86.7%) was also statistically significant, although the percentage reporting any anal intercourse with primary but not with casual partners was not.

**Discussion**

The analysis in this study provides us with more detailed information than has been previously available in Canada on the sexual relationships and risk behaviours of a broad community sample of gay and bisexual men. The level of unprotected anal intercourse was found to be significantly higher within primary than in casual partnering. Overall, individuals with multiple partners were more likely to exercise safer sexual practices with their casual than primary partners. Men in casual partnerships reported less unprotected anal intercourse in the three months prior to the survey than those men with primary partners only and those with both a primary and casual partner. For individuals involved in both primary and casual relationships there is a clear trend to refrain from higher risk activity with casual partners. The overall reported level of at least one episode of unprotected anal sex in the previous three months of 24.7% is comparable to that of 27.8% reported for gay men from the same region in a previous study (Myers et al., 1993). This latter finding suggests that a level of safer sex practices has been maintained, if not increased. In contrast to some of the negative assumptions made about promiscuity and multiple relationships of gay men, it would appear that casual relationships do not reflect recklessness, protection and care are exercised.

The findings presented here must be understood in the context of the social environment. Previous research found considerable variation in the level of risk behaviour by geographic region with greater proportions of men participating in high risk behaviour in areas where there was a lower known HIV prevalence (Myers et al., 1996). The present study was conducted in a relatively low HIV prevalence area. The estimated HIV prevalence based on antibody testing of the study population is approximately 8% compared to that of gay men in other regions of the country where it is thought to be 20 % or higher (Myers et al., 1993; Myers et al., 1995; Ngyugen et al., 1999).

It is also important to place the findings in the context of community norms. The behavioural norms for gay men are influenced both by the values of heterosexual society-which often emphasize monogamy and the nurturing aspects of relationships-and by the values of a gay
subculture that accepts openness and identification of the gay experience with liberation (Rofes, 1998; Rotello, 1997). Anecdotally, members of the gay community where the study was conducted acknowledged this emphasis on partnering and suggested that it might be explained by the lack of opportunities for more casual relationships in smaller communities than are available in larger communities. The social and structural features of gay life in the mid-size community where the study was conducted may thus be more strongly influenced by heterosexual norms and family life than in larger, more urban areas with more clearly identifiable gay communities. It has been previously reported that men who live in smaller communities are more likely to be in relationships and to be behaviourally bisexual (Myers et al., 1996; Myers and Allman, 1996). The current study supports these dynamics. While 76% of the study population indicated that they considered themselves to be gay or homosexual and 20% thought of themselves as bisexual, 35% indicated that their friends and colleagues considered them to be heterosexual. Clearly, there is much to be learned about the socialization and relationships of gay and bisexual men. Ortiz and Scott (1994), in referring to conservative motivation theory, suggest that there are conscious and unconscious motivations that affect the formation of homosexual men’s relationships. These authors claim that the dominance of traditional Judeo-Christian religions and cultural beliefs are strongly anti-homosexual. Homosexuals, who have no positive role models, cope by denying, ignoring and minimizing their desires which affects the quality of their life and relationships.

Further study is needed in communities of different sizes to understand the role that social environment may have on the relationships of gay and bisexual men and the types of behaviours they are willing to engage in. While this study has given us some information on the sexual behaviours and levels of risk within different types of relationships, there is a need for more extensive research that will provide better understandings of these behaviours. Some partnering issues for further research include: (1) how men experience their relationships; (2) how men behave and communicate in different types of relationships; (3) longevity of relationships between men and the factors influencing longevity (e.g., the role of casual partners, social networks, peer and family support); (4) patterns of partnering and serial relationships; (5) the effects of culture and ethnicity on relationships and sexual behaviour; (6) the role of sexual identity and sexual behaviour in the formation of relationships; (7) power differentials in men's relationships; (8) generation and age differences in relationships; and (9) the influence of sero-status on sexual behaviour and relationships.

In order to develop broader MV preventive education programs for gay and bisexual men, it is necessary to acknowledge and address the diversity that exist within relationships, the context of the relationships, and the risks both within individual relationships and within an individual's sexual network. Prevention programs need to recognize multiple concurrent relationships and serial relationships. It is important that such programs be non-judgmental in light of the increasing recognition that some gay relationships do not fit any norm. It also is
important to foster open discussion about partnerships within different sexual identities of men who have sex with men.

Acknowledgment

We are grateful to the participants, community groups, bars and bathhouse of Winnipeg, the Advisory Working Group, to Ken Brand, John Schellenberg, the staff and volunteers of the Winnipeg Village Clinic, and to staff of the Ontario Ministry of Health's HIV Laboratory. The project was funded by the Division of HIV/AIDS Epidemiology, Laboratory Centre for Disease Control, Health Canada and Research Unit Funding from the AIDS Bureau, Ontario Ministry of Health and Faculty of Medicine. T. Myers and L. Calzavara were partly funded as National Health Scholars for HIV/AIDS Research.

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