Variation in Sexual Orientations Among Men Who Have Sex With Men, and Their Current Sexual Practices
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Abstract

Purpose: To explore group variations in sexual risk-taking among different sexual orientations of men who have sex with men (MSM). Method: A convenience sample of men was recruited in gay-identified venues. An analysis was conducted to determine the independence of sexual orientation (gay, gay-previous heterosexual, currently bisexual), age and risk-taking. Results: Bisexual men were younger, lived outside metropolitan areas and socialized more in bathhouses. In general, bisexuals reported the safest sexual practices and previously heterosexual men the most unprotected. Conclusions: Among MSM, variation in sexual orientations was associated with differences in unprotected sex for older age groups. For the youngest age group, a similar level of risk-taking of the different orientation groups suggests uniform sociocultural influences.

In spite of public health concern, few studies in the HIV literature attempt to understand how the sexual orientation and sexual experience of men who have sex with men (MSM) vary and how this may influence risk-taking behaviour and HIV transmission. No reported Canadian data distinguish between the characteristics of bisexual and homosexual or heterosexual men. Although the potential risk of HIV transmission both to and from the male and female partners of MSM is frequently voiced, few efforts are made to understand the behaviour of this population. Generally, in the HIV and AIDS literature, bisexual men are grouped with gay men into a single entity. Further, the operational definition of the population of MSM is broad and frequently behavioural, with little attention given to any alternative dimensions by which bisexuality may be defined, such as self-identity, sexual attraction or fantasy.

It has been suggested that the expression of sexual orientation may be socially and/or culturally influenced and may reflect personal circumstance and situations. (1, 2) Internationally, only limited attempts have been made to understand some of the differences among subgroups of MSM. (3) For Sittitrai et al. (4) bisexuality can be conceptualized as a) a description of an individual's sexual experience or behavior over a period of time, b) a description of the person's
preference for sexual partners, c) a term of self-identification (that the person sees himself as desiring or engaging in sexual encounters with members of both sexes), or d) society's perceptions of bisexuality. Many definitions of bisexuality often do not distinguish men who have sex only with men from men who have sex with both men and women. Bisexual behaviour itself has been described as "the heterosexual activity of homosexual men", (5) as "sexual relationships with both male and female partners", (6 7) and as "homosexuals engaging in sex with at least one woman". (8) Few studies have attempted to understand how the sexual orientation and sexual experience of men who have sex with men vary, and what role any such differences have in risk-taking and ultimately the transmission of HIV.

In this paper the sexual risk-taking behaviour of MSM is examined in terms of sociodemographic characteristics and of sexual orientation based upon lifetime sexual experience.

Method

Study design

The survey was conducted in a large Canadian city with an organized gay community and the most cases of HIV/AIDS in Canada. A convenience sample of 1,295 men, recruited in 12 gay-identified bars and 3 bathhouses, was asked to complete a questionnaire anonymously. Demotic wording was used in the questionnaire to describe sexual behaviours. To approximate a random cross-sectional sample, quotas based on estimates of venue patronage were established.

Because of venue differences, four versions of the questionnaire were used: in bathhouses, a full-length questionnaire requiring 20 to 30 minutes of a respondent's time; in bars, three shorter versions. Data were collected on demographic characteristics, lifestyle, knowledge, attitudes, sexual behaviour and sexual experience (last sexual experience with a man and last sexual experience with a woman). A three-category variable of sexual orientation was created: gay (lifetime sex exclusively with men), gay-previously heterosexual (sex exclusively with men in previous year but before that with women), and currently bisexual (sex with both men and women in the previous year).

Analysis

Simple descriptive statistics were used for continuous data and proportions for categorical data. Associations between sexual orientation and demographic variables and sexual behaviour were examined using chi-square. Two variables—place of recruitment and number of "persons living with AIDS" known by the respondent—were used as proxy measures to explore the relationship between sexual orientation and gay community affiliation. A three-way contingency table (log
linear model) analysis was used to examine the independence of sexual orientation, age and sexual risk-taking behaviour.

**Results**

*Sociodemographic characteristics*

The overall refusal rate, calculated from the number who refused, were ineligible because of inebriation, had previously completed the survey, or chose to complete it at a more convenient time, was 27.1%. Questions regarding sexual experience yielded a total sample of 640 upon which this analysis is based. Some versions of the questionnaire did not ask about sexual experience. Age ranged from 18 to 70 with a mean of 34.3 (SD = 9.5 years); only 13.6% were aged 24 and under, and 57.4% were under age 35. Partial or complete high-school education was reported by 26.4%, and 73.7% had at least some college education. For 7.3% annual income was $10,000 or less, 11.4% had an income between $10,000 and $20,000, and 17.2% had an income of $50,000 or more. The predominant language "first learned, and still spoken" was English (84.5%). French, the next most common language, was indicated by 6.4%. The majority of respondents lived in the metropolitan area, about 10% lived elsewhere in the province, and 12.8% were from outside the province.

*Sexual experience - orientation*

Since recruitment was conducted in gay-identified venues and promotional material was targeted at the gay community, most respondents were gay-identified to some degree: 308 (48.1 %) were classified as exclusively gay and 226 (35.3%) as gay with previous heterosexual experience. In the latter group, 155 (68.6%) reported that their last sexual experience with a woman had been more than five years ago. Eighty-three (12.9%) of the total study population were currently bisexual, and 23 (3.5%) could not be classified.

Table I compares the sociodemographic characteristics of the three groups classified by sexual experience. Significant age differences were found between the groups. The currently bisexual group had the greatest proportion of men aged 24 or under ($X^2$= 11.4, df=4, $p<0.05$). A significant association was also found in relationship status: previously heterosexual men were more likely to report that they were in a relationship with a man than were the other two groups. Of the 83 men classified as currently bisexual 33.3% reported that they were in a relationship with a woman, and 23.5% indicated that they were in a relationship with a man. No significant difference was found with other sociodemographic variables, including education, income and language.
Gay community affiliation

Significant differences between the three groups were found for the three variables associated with gay community affiliation. Previously heterosexual men were significantly more likely than the other groups to know a person living with HIV/AIDS, whereas currently bisexual men were more likely to report that they knew no one living with HIV ($X^2=33.5$, df=6, $p<0.001$). Further, bisexual men were significantly more likely to be recruited in bathhouses ($X^2=9.4$, df=2, $p<0.01$), and were more likely to be from outside the metropolitan area ($X^2=9.6$, df=2, $p<0.01$).

Sexual behaviour

Figure 1 describes the prevalence of 11 sexual activities for the three subgroups. There was a trend for a greater proportion of previously heterosexual men to participate in all sexual activities. The difference between groups regarding reported anal intercourse was not significant; however, significant differences were found for the activities of deep tongue kissing ($X^2=17.9$, df=2, $p<0.001$), oral-genital insertive intercourse ($X^2=10.6$, df=2, $p<0.005$), oral-genital receptive intercourse with no exchange of semen ($X^2=12.7$, df=2, $p<0.005$) and oral-anal receptive activity ($X^2=7.0$, df=2, $p<0.05$). A greater proportion of gay men with previous heterosexual experience participated in these activities.

The 11 sexual activities were recoded into a four-category variable reflecting risk (no sex, no anal intercourse, protected anal intercourse only, and unprotected anal intercourse only). Significant differences were found between the three subgroups of men, as shown in Table II. Currently bisexual men (13.3%) and gay men (11.0%) were more likely to report no sexual activity than previously heterosexual men (3.5%) ($X^2=19.8$, df=6, $p<0.005$). Further, previously heterosexual men were more likely to report at least one episode of unprotected anal sex (22.6%) than gay men (17.2%) or currently bisexual men (13.3%).

Table II also shows the number of male sexual partners reported by men in each group. Bisexual men reported having had fewer sexual partners in the previous year (33.7% reported 10 or more sexual partners) than either gay men (47.1%) or previously heterosexual men (54.9%) ($X^2=13.7$, df=4, $p<0.01$).

Age, sexual orientation and level of sexual risk

Because of the high proportion of currently bisexual men in the 24 and under age group, a three way contingency table was produced (CATMOD) to examine the variation in risk behaviour and sexual orientation with age. This was done using age, sexual orientation and a three-category variable of sexual behaviour (no sex, always protected anal intercourse, and at least one reported episode of unprotected anal intercourse in the previous three months). A significant three-way
interaction was found (see Table III). For the youngest, aged 24 or less, there were no associations, but for those aged 25 to 34 there was an association between sexual orientation and behavior ($X^2= 11.4, \text{df}=4, p<0.05$): a greater proportion of previously heterosexual men (27.3%) reported unprotected anal intercourse than either gay men (19.1%) or currently bisexual men (18.8%). In addition, these men were more likely to participate in all forms of anal intercourse (77.2%) than gay (66.9%) or bisexual (46.7%) men. Similar results were reported for men aged 35 and over, gay men being the most likely to report no anal intercourse (50.0%) as compared with 31.3% of bisexual men and only 29.4% of previously heterosexual men. The highest level of unprotected anal intercourse in this age group was reported by men with previous heterosexual experience (19.6%) followed by 12.9% of gay men and 6.3% of currently bisexual men.

**Discussion**

The characteristics of the subgroups of men classified for sexual orientation on the basis of their lifetime sexual experience were distinct in a number of ways. Typically, men who identified themselves as currently bisexual were younger, lived outside the metropolitan area, socialized to a greater extent in bathhouses and had less affiliation with the gay community. The higher proportion of young men in this group may reflect developmental aspects of sexuality: the men may be experimenting with their sexual feelings while responding to social pressures to conform to the heterosexual norms of society. There may also be a generational effect reflected in a greater peer acceptance of diverse sexual orientations among this age group than is found among older men.

In terms of risk behaviour, the bisexual group generally reported the safest sexual practices. Men with previous heterosexual experience reported the most risk-taking. The sexual risk-taking of the youngest group of bisexual men was no different than that of men with a more dearly identified gay orientation in the same age group. The comparable level of risk possibly reflects a uniform influence of culture that bears on youth of all sexual orientations. In older men it is likely that a more complex social environment and more established patterns of risk-taking differentiated the groups.

The results reported in other studies are somewhat different from those found in this study. Fitzpatrick et al. (9) reported that behaviourally identified bisexuals had a higher incidence of active or insertive anal sex in the previous year (63%) than self-identified bisexuals and homosexuals (58%), and a higher mean number of female partners during that time. Bennett et al. (10, 11) found that in the previous six months, 46% of their sample had engaged in unsafe sexual practices with one male and one female partner, and a further 44% had engaged in unsafe sexual practices with at least one male or one female during the same period. Only 10% engaged in safer sex with all partners. Doll et al. (12) found the risk perception score for heterosexuals and bisexuals was significantly lower than for homosexuals. The difference between these
findings may reflect differences in recruitment. For the current study, recruitment was narrowly focused on gay-identified men, and efforts to obtain "hidden" or non gay-identified men were limited. Further, as the study relied on respondents' ability to read and write English we may have missed men in some ethnocultural groups. 

This analysis provides only a limited look at the diversity of sexual orientation among gay and bisexual men. By virtue of the venue-based recruitment, respondents in the study had some identification with the gay community. Future studies should attempt to capture a broader cross-section of MSM by extending recruitment beyond gay-identified venues to community organizations and social groups as well as to alternative venues where MSM meet sexual partners (i.e., parks, telephone lines and classified advertisements). Because random sampling of gay and bisexual men is not possible in most communities, repeated studies of this type will provide better understanding of this population's size and behaviour. (13)

The study was conducted in a metropolitan area, and it may not be generalizable to the larger Canadian population. There are data to suggest that differences exist with community size. (14). This requires further exploration in a variety of communities, and also through studies that recruit "hidden" or more closeted populations of MSM. We know little about bisexual men and whether their behaviour and lifestyle are comparable more to heterosexual-identified or to gay-identified males. Further, there may be differences between ethnocultural communities, of which there are many in Canada. There is evidence to suggest variation in the extent and form in which male sexuality is expressed within different ethnocultural communities. (8, 15, 16) Much remains to be explored in order to understand the spectrum of sexuality of MSM and its implications for public health.

For prevention and public health education programs, this study highlights the importance of acknowledging the diversity in the MSM population. A single educational message or approach is inappropriate; rather, campaigns must be sensitive to and aware of the diversity within the population.

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References


NB: For Tables and Figure see www.jstor.org/stable/41991346