Same-Sex Attraction Disclosure to Health Care Providers Among New York City Men Who Have Sex With Men

Implications for HIV Testing Approaches

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Background: While the Centers for Disease Control and Prevention recommends at least annual human immunodeficiency virus (HIV) screening for men who have sex with men (MSM), a large number of HIV infections among this population go unrecognized. We examined the association between disclosing to their medical providers (eg, physicians, nurses, physician assistants) same-sex attraction and self-reported HIV testing among MSM in New York City, New York.

Methods: All men recruited from the New York City National HIV Behavioral Surveillance (NHBS) project who reported at least 1 male sex partner in the past year and self-reported as HIV seronegative were included in the analysis. The primary outcome of interest was a participant having told his health care provider that he is attracted to or has sex with other men. Sociodemographic and behavioral factors were examined in relation to disclosure of same-sex attraction.

Results: Among the 452 MSM respondents, 175 (39%) did not disclose to their health care providers. Black and Hispanic MSM (adjusted odds ratios, 0.28 [95% confidence interval, 0.14-0.53] and 0.46 [95% confidence interval, 0.24-0.85], respectively) were less likely than white MSM to have disclosed to their health care providers. No MSM who identified themselves as bisexual had disclosed to their health care providers. Those who had ever been tested for HIV were more likely to have disclosed to their health care providers (adjusted odds ratio, 2.10; 95% confidence interval, 1.01-4.38).

Conclusions: These data suggest that risk-based HIV testing, which is contingent on health care providers being aware of their patients’ risks, could miss these high-risk persons.

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While it is estimated that only between 2.8% and 10.0% of the male population is gay or bisexual,1-3 men who have sex with men (MSM) bear a disproportionate burden of adverse health outcomes. Compared with heterosexual men, MSM are significantly more likely to abuse drugs and alcohol,4,6 smoke cigarettes,7,8 suffer from depression and other mental disorders,9,11 attempt suicide,11-14 and become infected with a sexually transmitted disease (STD) or human immunodeficiency virus (HIV).15-17 Among men in New York City (NYC), New York, in 2005, 51.5% of new HIV diagnoses were among MSM,18 representing 37.4% of all new HIV diagnoses in NYC. Nationally, these figures are 66.8% and 49.1%, respectively.19 Furthermore, it is estimated that 25% of individuals infected with HIV are unaware of their infections.20 This proportion among high-risk MSM younger than 30 years is estimated to be 48%.21 Men who have sex with men who are unaware of their HIV infections are reported to more likely be nonwhite, have a history of an STD, have a greater number of lifetime sexual partners, and be tested for HIV less frequently than HIV-negative MSM.22

Although the Centers for Disease Control and Prevention (CDC) now recommends routine testing,23 risk-based HIV testing remains common. While the previous 2001 CDC recommendations advocated routine screening in health care settings with an HIV prevalence of 1% or greater,24
METHODS

The NHBS methodology has been described elsewhere.\textsuperscript{37-39} In short, the NHBS is a CDC-supported surveillance system designed around a series of cross-sectional behavioral risk surveys conducted in 17 cities. The NHBS-MSM, conducted between July 2004 and January 2005, used a multistate venue sampling scheme to elucidate the frequency of risk behaviors among MSM attending public venues, such as bars, dance clubs, business establishments, social organizations, sex establishments, and street locations. The analysis presented herein is limited to the NHBS-NYC data. Formative research was used to identify venues and associated days and times when MSM attended these venues. A venue was eligible to be included in the monthly sampling frame if the venue produced a minimum of 8 MSM during a 4-hour sampling period. This minimum was chosen to obtain the required sample size within a reasonable period. Each month, a sample of 12 to 16 venues was randomly selected, and for each venue, a daytime period was randomly selected.

During each 4-hour sampling event, men were approached by NHBS staff to determine eligibility. The eligibility criteria were at least 18 years of age and a resident of the New York Metropolitan area (the 5 boroughs and specified contiguous counties in the states of New York and New Jersey). Sexual orientation and behaviors were not included as eligibility criteria and were not ascertained in the initial approach. Eligible men were escorted to a mobile van equipped with interview rooms where a trained interviewer/counselor obtained informed consent, administered a standardized questionnaire, conducted HIV pretest counseling, obtained a blood specimen, and provided referrals for social and medical services as needed. The survey and HIV antibody testing were anonymous.

Handheld computers were used to collect and enter data on demographics (eg, age, race/ethnicity, years of education, income, living situation, sexual identity, venue of recruitment), sexual risk behaviors (eg, type of partners, number of male and female partners, unprotected anal intercourse), drug and alcohol use (eg, injection drug use, noninjection drug use, high on alcohol or drugs during sex), history of HIV antibody testing, and self-reported diagnosis of other infections (eg, STD, hepatitis B or C virus).

This analysis was restricted to respondents of the NHBS-NYC who reported having had sex with a man in the last 12 months and were not self-reported HIV seropositive. Disclosure of being gay or bisexual to one’s health care provider was the primary outcome of interest in this analysis and was ascertained by the question “Have you told any health care providers that you are attracted to or [have] sex with other men?” Respondents were classified as having disclosed to their health care providers if they answered yes to this question and no if they responded in any other way (no, unknown, or missing). Characteristics examined in relation to disclosure to one’s health care provider include sociodemographics, HIV testing and STD history, number of sexual partners, and drug-using behaviors. Since MSM who do not have a regular health care provider would not have an opportunity to disclose to their health care provider, we also estimated univariate and adjusted ORs for those MSM who reported seeing a health care provider in the last year—a proxy measure for having a regular health care provider. Another outcome of interest was HIV testing history. Respondents were asked about whether they had ever been tested for HIV, if they had been tested in the last year, and if their health care provider had recommended an HIV test.

Men who have sex with men who reported disclosing to their health care provider were compared with those who had not disclosed using \( \chi^2 \) statistics. Measures of effects were estimated using odds ratios (ORs) and the corresponding 95% confidence intervals (CIs).\textsuperscript{40} Independent factors associated with disclosure to one’s health care provider were assessed through multiple logistic regression models. Factors associated disclosure to one’s health care provider at a significance level of \( P < .10 \) and these factors were considered for inclusion in the multiple logistic regression modeling. The final logistic regression model was determined using likelihood ratio statistics. All analyses were conducted using SAS version 9.1 statistical software (SAS Institutes Inc, Cary, North Carolina).

RESULTS

A total of 452 NYC-NHBS participants reported having had sex with a man in the last 12 months and being HIV seronegative. Overall, the median age of the MSM respondents were 28 years and the median time living in NYC was 10 years. Nearly half had graduated from college. Approximately one-third of participants were white, 21% were black, and 28% were Hispanic. Most (77%) were born in the United States and reported having a regular place to live (94%). Over three-quarters of the MSM identified themselves as homosexual and 20% as bisexual. A majority (84%) reported seeing a health care provider in last year, and 90% reported having ever been tested for HIV. However, only one-third of MSM reported that their health care providers recommended an HIV test.
More than one-third of NHBS-NYC MSM (39%) reported that they had not disclosed to their health care providers. Significant differences were observed between MSM who had and had not disclosed to their health care providers (Table 1). Men who have sex with men who were 28 years or older (OR, 2.04; 95% CI, 1.39-3.00) and born in the United States (OR, 1.60; 95% CI, 1.02-2.50) were more likely to have disclosed to their health care providers. Better educated MSM were more likely to have disclosed to their health care providers. Furthermore, white MSM were significantly more likely to have disclosed to their health care providers compared with black MSM (OR, 0.16; 95% CI, 0.09-0.28), Hispanic MSM (OR, 0.25; 95% CI, 0.15-0.42), and Asian/Pacific Islander MSM (OR, 0.26;
95% CI, 0.10-0.69). While those with private health insurance were more likely than the uninsured to have disclosed to their health care providers (OR, 2.41; 95% CI, 1.57-3.71), MSM with public insurance were no more likely to have disclosed same-sex attraction to their health care providers. Men who have sex with men who reported an annual income greater than $10 000 were also more likely to have disclosed to their health care providers.

History of HIV and STD testing was also associated with disclosure to one’s health care provider. Having ever been tested for HIV was significantly associated with having disclosed to one’s health care provider (OR, 2.23; 95% CI, 1.21-4.14). Nonetheless, MSM who were HIV tested in the last year were not more likely to have disclosed to their health care providers (OR, 0.98; 95% CI, 0.65-1.48) compared with those who had not been HIV tested in the last year. Men who have sex with men who reported seeing a health care provider in the last year (OR, 1.56; 95% CI, 0.94-2.61) or having a health care provider recommend an HIV test (OR, 1.48; 95% CI, 0.98-2.23) were more likely to have disclosed, although these findings were of borderline statistical significance. Men who have sex with men who had been tested for syphilis (OR, 1.78; 95% CI, 1.19-2.66) and gonorrhea (OR, 1.68; 95% CI, 1.11-2.52) and had been diagnosed as having another STD in the past year (OR, 2.07; 95% CI, 1.18-2.53) were more likely to have disclosed to their health care provider.

New York City National HIV Behavioral Surveillance participants who reported having more than 5 male sexual partners in the last year (OR, 1.73; 95% CI, 1.18-2.53) were more likely to have disclosed to their medical providers, while those reporting having any female partners were significantly less likely (OR, 0.09; 95% CI, 0.05-0.16). Statistically significant differences were not seen between those who had and had not disclosed to their health care providers with respect to the frequency of unprotected anal sex. Men who have sex with men reporting use of cocaine (OR, 1.77; 95% CI, 1.08-2.91) and amyl nitrate (poppers) (OR, 2.09; 95% CI, 1.21-3.63) were more likely to have disclosed. The additional univariate analysis, restricted to those MSM who reported seeing a health care provider in the past year (n=381) (a proxy for having a health care provider to disclose to) produced findings that were largely unchanged.

The final multivariate logistic regression models are presented in Table 2. When the entire NHBS-NYC MSM sample was examined, whites were significantly more likely than blacks (adjusted OR, 0.28; 95% CI, 0.14-0.53), Hispanics (adjusted OR, 0.46; 95% CI, 0.24-0.85), and Asian/Pacific Islanders (adjusted OR, 0.38; 95% CI, 0.12-1.12) to have disclosed to their health care providers. Men who have sex with men who reported having been tested for HIV were more than 2 times more likely to have disclosed to their health care providers (adjusted OR, 2.10; 95% CI, 1.01-4.38). Also, MSM who were born in the United States were significantly more likely to have disclosed to their health care providers. Men who have sex with men who reported having any female partners in the last year were more than 9 times less likely to have disclosed to their health care providers (adjusted OR, 0.11; 95% CI, 0.06-0.23). When the multivariate analysis was restricted to those MSM who reported seeing a health care provider in the past year, most findings were strengthened.

We further explored the relationship between race/ethnicity, self-described sexual orientation, sex with women, and disclosure to one’s health care provider. Among MSM respondents who identified themselves as gay (n=351), 78.1% had disclosed to their health care providers; the proportion disclosing to their health care providers was significantly different by race/ethnicity (P = .02). Self-identified gay black MSM reported disclosing to their health care providers less frequently (68.5%). None of the 86 self-identified bisexual MSM reported disclosing to their health care providers. Similar trends were seen by racial/ethnic group when sexual behavior (sex with men only and those who reported sex with men and women) was examined.

We examined factors associated with disclosing same-sex attraction and behavior to one’s health care provider in a well-characterized population of urban MSM from the NHBS-NYC. More than a third of MSM (39%) interviewed in NYC reported not having told their medical providers of their sexual attraction or contact with men. White MSM were significantly more likely to have disclosed to their health care providers than nonwhite MSM, as were MSM who reported having no female sex partners. Men who have sex with men who were born in the United States were more likely to have disclosed to their health care providers. Furthermore, MSM respondents who had ever been tested for HIV were more than 2 times more likely to have disclosed to their health care providers.

Effective HIV risk assessment in the clinical setting requires not only the health care provider to inquire about patient attributes and behaviors, but also the patient to...
answer honestly and frankly. It is often the patient’s expectation that the health care provider initiates this discussion;
however, published data suggest that health care providers rarely do. In a study conducted in 1992, at the height of risk-based HIV testing, only 27% of surveyed physicians asked their patients about their sexual orientation, while 95% of these health care providers report that they would recommend HIV screening for homosexual men with multiple partners and 91% for all homosexual men.28 In a study in which 78 provider-patient interactions were videotaped, only 10% involved a significant enough discussion for HIV risk to be adequately assessed; 65% of the interactions involved no discussion of HIV.41

If disclosure of risk information is causally associated with physicians’ recommending HIV testing, as suggested by our data, improving and promoting discussions of risk behaviors between clinicians and men who have sex with both men and women would be one potential approach to increasing HIV testing among MSM. While these discussions are clearly important for many reasons, routine HIV testing of all persons regardless of disclosed risk behavior is an alternate approach to increasing access for those not disclosing their risk behaviors.

The 2006 CDC recommendations for HIV testing endorse routine testing of all US adolescents and adults aged 13 to 64 years.23 While the 2006 recommendations are not the first to advocate more widespread screening,21,42,43 they represent the strongest push for routine testing and support the findings of others.44-47 We estimated that in 2000, only 27% of US physicians were routinely screening their male and nonpregnant female patients for HIV.23 We report herein that in a venue-based sample of MSM, among the 351 who identified themselves as gay, 78% had disclosed to their health care provider compared with none of the 86 MSM who identified themselves as bisexual. In our study, bisexual self-identification was significantly more common among black (35%) and Hispanic (27%) compared with white (4%) MSM. Others have reported higher rates of bisexuality among nonwhite MSM.55,56

The relationship between race/ethnicity, bisexuality, and “outness” (identifying as gay) is complex. Non-gay-identified MSM have been shown to be less likely to have been HIV tested55,57 and less likely to have been exposed to information about HIV/AIDS.55 Furthermore, non-gay-identified MSM have been shown to be untrusting of information from the local government or the CDC regarding HIV/AIDS and rate their health care providers as the most reputable source for this information.53 Bisexual black men are less likely than bisexual whites to disclose their MSM behaviors to their female partners.58 It has also been suggested that perceived and experienced homophobia may vary by racial/ethnic group.59-63 When stratified by self-reported sexual orientation or sexual behavior, white MSM were consistently more likely to have disclosed to their health care provider. While rates of HIV infection among self-identified bisexual MSM are lower than those of homosexually identified MSM, adequate access to HIV testing in MSM populations may be critical in reducing transmission.21,64

This analysis has several limitations. First, this survey was not designed to specifically assess the degree of disclosing to one’s health care provider. Our outcome was defined by 1 question. Since this analysis was restricted to data collected through the NHBS, we did not have data regarding the health care providers’ sexual orientation or the type of health care providers seen, which would have helped in further exploring the relationship between disclosure and testing. It is possible that participants had multiple health care providers and had disclosed to some and not to others. In addition, we used visiting a health care provider in the past year as a proxy measure for having regular health care. In this study, the participants were recruited from gay locations and venues and may not represent all MSM in NYC. However, recent reports suggest that venue-based sampling schemes provide reasonable estimates of MSM populations in urban areas.55,66 Our estimates of nondisclosure may be con-
sensitive, since non–gay-identified MSM may be less likely to frequent gay venues and in turn may be less likely to be included in the NHBS sample. New York City represents a unique urban environment and the results of this analysis may not be generalizable to other cities or areas. Furthermore, because this was a cross-sectional survey, we are unable to determine if disclosure of being gay or bisexual to one’s health care provider was causally associated with having been HIV tested.

In our sample of urban MSM, more than one-third of participants reported not disclosing to their health care provider. Although universal screening is recommended in the United States, many US health care providers continue to apply risk-based HIV testing. Our results suggest that MSM who did not disclose to their health care providers engaged in high-risk behaviors but may be less likely to be tested for HIV. Furthermore, these men were significantly more likely than more “out” MSM to have female partners. This may facilitate bridging of HIV from homosexual to heterosexual populations. While the reasons for not disclosing one’s sexual orientation to one’s health care provider are numerous and varied, perceived or experienced homophobia is likely involved. The non-acceptance of homosexuality, by members of the medical community as well as the general public, may facilitate HIV transmission by limiting access to and acceptance of HIV testing, particularly when risk-based testing models are used. Fostering more supportive and open communication between patients and health care providers with respect to sexual behaviors is important. Finally, routine testing, particularly when risk-based testing models are applied, may facilitate bridging of HIV from homosexual to heterosexual populations. While the reasons for not disclosing one’s sexual orientation to one’s health care provider are numerous and varied, perceived or experienced homophobia is likely involved. The non-acceptance of homosexuality, by members of the medical community as well as the general public, may facilitate HIV transmission by limiting access to and acceptance of HIV testing, particularly when risk-based testing models are used. Fostering more supportive and open communication between patients and health care providers with respect to sexual behaviors is important. Finally, routine testing, particularly when risk-based testing models are applied, may facilitate bridging of HIV from homosexual to heterosexual populations.

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