

## Self-Identification as “Down Low” Among Men Who Have Sex with Men (MSM) from 12 US Cities

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**Abstract** Men who have sex with men (MSM) who are on the “down low” (DL) have been the subject of considerable media attention, but few data on this population exist. This exploratory study ( $N = 455$ ) compared MSM who considered themselves to be on the DL with MSM who did not (non-DL MSM). 20% self-identified as DL. Blacks and Hispanics were more likely than Whites to self identify as DL. MSM who did not identify as gay were more likely than gay-identified MSM to describe themselves as DL. DL-identified MSM were less likely to have had seven or more male partners in the prior 30 days, but were more likely to have had a female sex partner and to have had unprotected vaginal sex. DL-identified MSM were less likely to have ever been tested for HIV than were non-DL MSM. Prevention agencies should expand existing programs for MSM to include specific efforts to reach DL MSM.

**Keywords** HIV prevention · Homosexuality · Bisexuality · Sexual behavior · Sexual orientation · Labeling · Self concept · Risk factors · African Americans · Hispanics

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### Introduction

Men “on the down low” who have sex with men (DL MSM) have been the subject of considerable media attention (Denizet-Lewis, 2003; King, 2004; Sternberg, 2001). Although the notion of what it means to be on the down low has not been consistently defined, existing definitions often share five similarities. DL MSM have typically been characterized as: (1) Black, (2) not identifying as gay, (3) having sex with both men and women, (4) not disclosing their sexual behavior with men to female partners, and (5) never, or inconsistently, using condoms with males and females. Despite the attention given to this population in the media, scant empirical data on DL MSM and their risk of HIV acquisition and transmission have been published (Boykin, 2005; Malebranche, 2003; Mays, Cochran, and Zamudio, 2004; Millett, Malebranche, Mason, and Spikes, 2005; Montgomery, 2003; Paz-Bailey, Meyers, Blank, Brown, and Rubin, 2004; Prabhu, Owen, Folger, and McFarland, 2004; Thompson, 2005). This lack of data is highly problematic. It likely contributes to the divisive nature of much of the discourse surrounding DL MSM, which is largely based on anecdotal reports and externally applied labels. The use of external labels, rather than self-defined identities, may serve to inadequately capture the experiences of sexual-minority groups and further marginalize these individuals (Young and Meyer, 2005).

Although few data specific to DL MSM are available, data on nongay identified MSM (NGI MSM), which includes bisexually and heterosexually identified MSM, do exist (Doll and Beeker, 1996). These data are consistent with some characterizations of DL MSM and are inconsistent with others. For example, Black MSM are less likely than White MSM to identify as gay, but Hispanic MSM also are less likely than Whites to describe themselves as gay (Goldbaum *et al.*, 1998;

McKirnan, Doll, and Burzette, 1995; Montgomery, 2003). Similarly, Blacks and Hispanics are more likely to report bisexual behavior compared to other MSM (Millett *et al.*, 2005; Montgomery, 2003) and are less likely to disclose bisexual behavior to others (Kennamer, Honnold, Bradford, and Hendricks, 2000; McKirnan *et al.*, 1995; Zea, Reisen, and Diaz, 2003). Available data demonstrate that bisexual behavior and nongay identity are not limited to MSM from any one racial/ethnic group, facts that suggest DL-identity may not be exclusive to Black MSM. These data also raise questions about the extent to which DL-identified MSM constitute a group that is distinct from other NGIMSM.

Data from NGI and gay-identified MSM suggest that internalized homophobia and keeping sexual encounters with men secret may limit the exposure of DL MSM to HIV prevention programs. Nondisclosure of same-sex behavior has been associated with internalized homophobia (Stokes and Peterson, 1998), which in turn has been associated with reduced participation in HIV prevention activities and in the gay community (Huebner, Davis, Nemeroff, and Aiken, 2002). Despite relatively high levels of exposure to HIV information, NGI MSM are less likely than gay-identified MSM to have been exposed to some specific sources of HIV information (Goldbaum *et al.*, 1998) or to have been tested for HIV (Rietmeijer, Wolitski, Fishbein, Corby, and Cohn, 1998). Although these data are likely to be applicable to at least some DL MSM, the ability of these findings to be generalized to DL MSM as a group is not currently known.

Some have suggested that the behavior of DL MSM may account for racial and ethnic disparities in HIV rates (see Boykin, 2005). Blacks and Hispanics are disproportionately affected by HIV/AIDS, but the degree to which the risk behavior of DL MSM accounts for this disparity among men and women is not clear. In 2003, Black and Hispanic MSM ( $n = 5128$ ) accounted for 46% of HIV infection cases among all MSM, and Black and Hispanic women ( $n = 7986$ ) accounted for 80% of HIV infection cases among all women. Heterosexual transmission is the primary risk factor for women, accounting for 39% of HIV cases among Black women ( $n = 6016$ ) and 42% of HIV cases among Hispanic women ( $n = 1970$ ). Only 2% of heterosexually infected Black and Hispanic women had a male partner who was known to be bisexual. However, no partner-associated risk was identified in one-third of heterosexually acquired cases, and 48% of Black and Hispanic women reported with HIV in 2003 had no identifiable risk for HIV infection (Centers for Disease Control and Prevention, 2004). Sexual contact with an HIV-seropositive bisexual male partner is likely to be a risk factor in at least some of these cases, particularly given that fewer than half of bisexual men in one study disclosed their same-sex encounters to their female partners (Wolitski, Rietmeijer, and Goldbaum, 1996).

The present study compared the racial identity, sexual identity, and sexual practices of MSM from 12 US cities who considered themselves to be DL with those of non-DL MSM. In addition, the study assessed differences in prior exposure to HIV prevention and whether some DL-identified MSM might be reached through the gay community. As such, the primary aim of this paper is descriptive and focuses on the pragmatic need of public health agencies to better understand the characteristics of DL-identified MSM, their risk of HIV infection and transmission, and their utilization of HIV prevention services. A secondary aim was to assess the extent to which DL-identity influences risk behavior and access to HIV prevention services independent of other potential confounding influences such as nongay-identity and race/ethnicity.

## Methods

Prior to implementation, all procedures were reviewed by institutional review boards at the Centers for Disease Control and Prevention (CDC) and Research Triangle Institute, Inc.

### Participants

Convenience samples were recruited from 12 cities in the northeastern (Baltimore, Boston, New York, Philadelphia, Washington, DC), southern (Atlanta, Houston, Fort Lauderdale, Miami), mid-western (Chicago), and western (Los Angeles, San Diego) regions of the United States. Participants were recruited from June to September of 2004 as part of a larger study evaluating HIV prevention messages for MSM. Recruitment methods included advertisements in gay-oriented publications, flyers posted in organizations and venues frequented by MSM, and announcements on MSM Internet sites. In some cities, market research firms contacted gay and bisexual men who had previously agreed to be informed about future research opportunities.

Potential participants were screened by telephone to determine eligibility. Eligibility criteria were reporting: (1) male gender, (2) HIV seronegative status or never having been tested for HIV, (3) sex with one or more male partners in the prior 6 months, and (4) anal sex without a condom in the prior 6 months. The overall study concerned the differential effects of prevention messages on Black, Hispanic, and White MSM. Thus, only men with a primary identification as a member of one of these racial/ethnic groups were eligible, and enrollment limits were used to ensure equal representation of each group. Potential participants were excluded at screening if they: (1) had participated in another HIV-related study in the prior year, (2) worked or volunteered in an HIV prevention program in the prior year, or (3) did not speak

English. Potentially eligible participants were scheduled for an in-person assessment visit.

### Measures

The in-person assessment consisted of: (1) written informed consent, (2) baseline assessment, (3) exposure or no exposure to an HIV prevention message, and (4) immediate posttest assessment. All data were collected using audio computer-assisted self-interview (A-CASI). The present study uses data from only the baseline assessment, which took a mean of 17 min to complete ( $SD = 5.9$ ). After all study activities were completed, participants received HIV information, local referrals, and \$75.

### Identification as down low

Self-identification as being on the DL was assessed using two questions. First, awareness of the DL term was assessed with a “yes/no” item, “Have you heard of the terms ‘on the down low’ or ‘down low’ being used to describe some men who have sex with men?” Men who were aware of the term were asked a second “yes/no” question: “Do you consider yourself to be on the down low?” DL-identified MSM were defined as those who answered “yes” to both questions. Men who were not aware of the term or did not consider themselves to be DL were classified as non-DL MSM. The questions did not define the meaning of “down low” because we were interested in describing the characteristics of men who identified with this term as they defined it for themselves. This decision was based in part on prior research showing that sexual practices do not necessarily correspond to the labels that individuals use to describe their sexual identity (Ross, Essien, Williams, and Frenandez-Esquer, 2003) and is supported by a recent commentary calling for the use of self-defined labels when working with sexual-minority groups (Young and Meyer, 2005). Further, given the lack of data on DL MSM, we were concerned that providing a definition based on race/ethnicity, gay identity, and/or behavior might inappropriately exclude some men who identify themselves as DL or include others who do not consider themselves to be on the DL.

### Demographics

The following participant characteristics were assessed: age, education, employment status, and sexual identity (gay/homosexual, straight/heterosexual, bisexual, none of above/unsure). All men who did not identify as gay/homosexual were classified for analyses as nongay identified due to small cell sizes. Race/ethnicity was determined by participants’ response to the following question: “Which category best describes how you identify yourself?” Al-

though eligibility was limited to specific racial/ethnic groups, a full range of response categories was provided: American Indian or Alaskan Native, Black or African American, Hispanic or Latino or Chicano, Native Hawaiian or Other Pacific Islander, White, Other, or Refuse to Answer.

### Sexual practices

Number of partners, number of male sex partners, anal sex, and condom use during anal sex were assessed for the prior 6 months. All other sex behavior data were collected for the 30 days prior to interview using items adapted from research with HIV-seropositive MSM (Wolitski *et al.*, 2005). Participants were asked separate sets of questions about sexual practices with their main partner and HIV-seropositive, HIV-seronegative, and unknown serostatus nonmain partners. For main partners, gender and HIV status were assessed; and for each type of nonmain partner (seropositive, seronegative, unknown serostatus), total number of partners and number of male partners were also assessed. Vaginal intercourse, insertive anal intercourse, and receptive anal intercourse were assessed separately for the main partner and each type of nonmain partner. For each behavior, participants were asked the number of times they engaged in the behavior with a condom and the number of times they engaged in the behavior without a condom. Men who reported vaginal intercourse with a female main partner were also asked, “Does your main partner know that you have sex with men?”

### Internalized homophobia

Internalization of negative attitudes toward homosexuality (Shidlo, 1994) was assessed using the sum of three items (Cronbach’s  $\alpha = 0.85$ ) measured on a 5-point scale (1: strongly disagree to 5: strongly agree). Higher scores indicate greater internalized homophobia. The three items were: (1) “Whenever I think a lot about being gay or bisexual, I feel depressed;” (2) “I wish I were heterosexual;” and (3) “Whenever I think a lot about being gay or bisexual, I feel critical of myself.”

*HIV testing, HIV information sources, and gay community participation.* Participants were asked if they had ever been tested for HIV, the date of their last test, whether they received the test results, the results of their last test, and, if they did not receive their last results, whether they had ever tested positive for HIV. Exposure to additional sources of HIV information (e.g., read an HIV-related publication or newspaper, attended a safer sex workshop) and involvement in the gay community (e.g., attended gay pride parade or festival, went to a gay bar or nightclub) in the past year were assessed with separate 8-item checklists. Both checklists included items that were adapted from a study of

HIV-seropositive MSM (Courtenay-Quirk, Wolitski, Hoff, and Parsons, 2003; Wolitski, Parsons, and Gomez, 2004).

The credibility of three HIV information sources (their own health care providers, local AIDS organizations, and the CDC) was assessed by asking participants to rate their “trust in various sources of HIV/AIDS prevention information” using a 10-point scale (1: do not trust at all, 10: trust completely).

#### Statistical analyses

Most analyses used logistic regression or general linear models to compare the characteristics, sexual practices, and internalized homophobia of MSM who described themselves as DL compared to those who did not. Poisson regression (adjusted for overdispersion) was used to compare HIV information sources and participation in the gay community for DL-identified versus non-DL MSM. For all analyses, unadjusted bivariate models were performed first to test differences between DL-identified and non-DL MSM that have a practical relevance for public health efforts to reduce HIV risk in this group. Multivariate models were then used to assess the independent effects of DL identity when gay identity, race/ethnicity, education, employment, and geographic region were adjusted for.

## Results

A total of 584 men were tentatively considered eligible based on the initial telephone screening and were scheduled for assessment; 552 (95%) initiated the baseline assessment. Baseline data from 97 participants (18%) indicated that they did not meet the eligibility criteria at the time of assessment. Data from these participants were excluded from further analysis. By design, one-third of participants ( $N = 455$ ) were Black ( $n = 150$ ), one-third were Hispanic ( $n = 153$ ), and one-third were White ( $n = 152$ ). The mean age of study participants was 35 years ( $SD = 9.9$ ), and ranged from 18 to 73. Most had at least some college education (77%, 350/455), were employed (71%, 321/455), and self-identified as gay (72%, 327/455). Forty-two percent (189/455) of participants were recruited from the northeastern United States. One-third were from the south (152/455), 14% were from the west (62/455), and 11% were from the mid-west (52/455). The majority of participants (74%, 328/455) were aware of the term DL.

Those who identified themselves as DL were compared to those who did not (Table 1). Substantial percentages of Black (41%) and Hispanic (17%) MSM identified themselves as DL. Compared to White MSM in bivariate analyses, Black MSM were nearly 16 times more likely to identify as DL, and Hispanic MSM were five times more likely to do so.

Bivariate analyses also indicated that MSM who did not identify as gay, those who had not attended college, and those who were currently unemployed were all more likely to identify as DL (Table 1).

Variables that were associated with DL identity ( $p < 0.10$ ) in the bivariate analyses were simultaneously entered in a single logistic regression. Education and employment status were no longer significantly associated with DL identity, but Black and Hispanic race/ethnicity and not identifying as gay continued to be associated with a greater probability of describing oneself as DL.

#### Internalized homophobia

Levels of internalized homophobia were higher among DL-identified MSM ( $M = 8.5$ ,  $SD = 3.5$ ) compared to non-DL MSM ( $M = 6.2$ ,  $SD = 3.0$ ,  $F(1, 450) = 42.64$ ,  $p < 0.0001$ ). This difference remained significant when race, geographic region, education, employment, and gay identity were controlled for,  $F(9, 442) = 46.62$ ,  $p < 0.0001$ .

#### Sexual behavior

Sexual practices of DL-identified MSM and non-DL MSM are shown in Table 2. Overall, participants reported a mean of 14.5 partners during the prior 6 months (Median = 7,  $SD = 28.9$ , range = 2 to 400); 45% reported sex with seven or more male partners. Most reported only male sex partners, but 25% had both male and female partners in the past 6 months. DL-identified MSM were less likely than non-DL MSM to have had seven or more male partners in the past 30 days. Considerable numbers of DL-identified and non-DL MSM reported having sex with men whose HIV status they did not know, and more than one-third of men in both groups reported unprotected receptive anal intercourse with a male partner.

DL-identified MSM were 10.6 and 7.9 times more likely to report having female partners in the past 6 months and in the past 30 days, respectively, compared to non-DL MSM. Among DL-identified MSM, 65% had one or more female partners in the past 6 months, and 40% had one or more female partners in the past 30 days. Overall, only 11% of MSM reported having both female and male partners in the prior 30 days, but DL-identified MSM were more than seven times more likely than non-DL MSM to report male and female partners during this period. DL-identified MSM were more likely than non-DL MSM to report having had vaginal sex in the prior 30 days, but most did not report having had unprotected vaginal sex. One-in-four (28%) DL-identified MSM had unprotected vaginal sex during this period.

Only 5% of MSM (25/455) reported that they currently had a female main partner. Most of the men with a female main partner 13/25 (52%) were non-DL MSM. Among

**Table 1** Correlates of self-identification as being on the down low among at-risk MSM<sup>a</sup>

	Self-identify as down low		Bivariate		Multivariate	
	Yes ( <i>n</i> = 93)	No ( <i>n</i> = 362)	OR	(95% CI)	Adj. OR	(95% CI)
	<i>n/n</i> (%)	<i>n/n</i> (%)				
<b>Race/ethnicity</b>						
White	6/152 (4)	146/152 (96)	Ref		Ref	
Hispanic	26/153 (17)	127/153 (83)	4.98	(1.99, 12.48)	5.07	(1.94, 13.28)
Black	61/150 (41)	89/150 (59)	16.67	(6.92, 40.16)	10.94	(4.27, 27.99)
<b>Age</b>						
<30 years	28/158 (18)	130/158 (82)	0.77	(0.47, 1.26)	–	–
≥ 30 years	65/297 (22)	232/297 (78)	Ref			
<b>Education</b>						
No college	34/105 (32)	71/105 (68)	2.36	(1.44, 3.88)	0.89	(0.45, 1.74)
At least some college	59/350 (17)	291/350 (83)	Ref		Ref	
<b>Employment</b>						
Unemployed	40/134 (30)	94/134 (70)	2.15	(1.34, 3.45)	1.16	(0.62, 2.18)
Employed	53/321 (17)	268/321 (83)	Ref		Ref	
<b>Geographic region</b>						
Northeast	35/189 (19)	154/189 (81)	Ref		Ref	
Mid-West	13/52 (25)	39/52 (75)	1.47	(0.71, 3.04)	0.98	(0.41, 2.30)
South	33/152 (22)	119/152 (78)	1.22	(0.72, 2.08)	0.90	(0.47, 1.74)
West	12/62 (19)	50/62 (81)	1.06	(0.51, 2.19)	1.49	(0.64, 3.51)
<b>Gay identified</b>						
Yes	29/327 (9)	298/327 (91)	Ref		Ref	
No	64/128 (50)	64/128 (50)	10.27	(6.14, 17.20)	8.44	(4.70, 15.16)

<sup>a</sup>Multivariate analyses control for race/ethnicity, education, employment status, geographic region, and gay identity as appropriate for each dependent variable.

DL-identified MSM with a female main partner, 4/12 (33%) reported that their partner knew that they had sex with other men. All 12 DL-identified MSM reported having vaginal sex with their main partner, and most reported at least some condom use (1 always used condoms, 8 inconsistently used condoms, and 3 never used condoms).

Most participants had anal sex with male or female partners in the prior 30 days, and 68% had had unprotected anal sex. DL-identified MSM were more likely than non-DL MSM to report having had unprotected anal sex with a partner whose serostatus they did not know. This finding was largely attributable to rates of unprotected insertive, but not receptive, anal intercourse. No other significant differences were observed for sexual practices.

#### HIV testing and exposure to HIV prevention

The majority of participants had been tested for HIV (Table 3). DL-identified MSM were less likely than non-DL MSM to have ever been tested, but rates of recent testing were similar. The difference for ever having been tested was not significant in the multivariate analysis, indicating that the bivariate difference was caused by another variable that was associated with DL identity. Most DL-identified and non-DL MSM had been exposed to other sources of HIV information

in the past year (Table 3), and DL-identified MSM received HIV information from about the same number of sources as non-DL MSM ( $M = 2.8$ ,  $SD = 2.0$  vs.  $M = 3.2$ ,  $SD = 2.0$ ; unadjusted  $\chi^2 = 2.89$ ,  $p < 0.10$ , adjusted  $\chi^2 = 2.18$ , *ns*). The specific types of HIV information sources differed between the two groups. Compared to non-DL MSM, DL-identified MSM were significantly less likely to have read an HIV-related publication in the bivariate, but not the multivariate, analysis (Table 3). In contrast, however, bivariate (but not multivariate) analyses revealed that DL-identified MSM were 2.1 times more likely to have attended a safer sex workshop than were non-DL MSM.

Health care providers were rated by DL-identified and non-DL MSM as the most trustworthy source of HIV information. Ratings of the trustworthiness of information from their health care provider did not differ between DL-identified and non-DL MSM ( $M = 7.1$ ,  $SD = 3.3$  vs.  $M = 7.6$ ,  $SD = 3.1$ , *ns*). DL-identified MSM were less likely to trust information from local AIDS organizations and the CDC. Ratings of the trustworthiness of information from local AIDS organizations were lower for DL-identified MSM compared to non-DL MSM ( $M = 5.7$ ,  $SD = 3.8$  vs.  $M = 7.0$ ,  $SD = 3.1$ ;  $F(1, 451) = 10.91$ ,  $p < 0.001$ ). DL-identified MSM also indicated less trust in information from the CDC than did non-DL MSM ( $M = 6.2$ ,  $SD = 3.5$  vs.  $M = 7.2$ ,  $SD = 2.9$ ;

**Table 2** Sexual partners and practices in the prior 30 days reported by MSM who self-identify as being on the down low and those who do not<sup>a</sup>

	Self-identify as down low			Bivariate		Multivariate	
	Total ( <i>n</i> = 455)	Yes ( <i>n</i> = 93)	No ( <i>n</i> = 362)	OR	(95% CI)	Adj. OR	(95% CI)
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)				
Main partner	209 (46)	47 (51)	162 (45)	1.26	(0.80, 1.99)	–	
Female main partner	25 (5)	12 (13)	13 (4)	3.98	(1.75, 9.04)	0.78	(0.29, 2.12)
Female partners							
Any female partners (past 6 months)	113 (25)	60 (65)	53 (15)	10.60	(6.33, 17.74)	1.94	(0.92, 4.12)
Any female partners	65 (14)	37 (40)	28 (8)	7.88	(4.47, 13.89)	2.41	(1.04, 4.12)
Vaginal sex	60 (13)	34 (37)	26 (7)	7.45	(4.17, 13.31)	1.75	(0.82, 3.73)
Unprotected vaginal sex	48 (11)	26 (28)	22 (6)	6.00	(3.21, 11.21)	1.67	(0.75, 3.72)
Sex with male partners							
Any male partners	376 (83)	73 (78)	303 (84)	0.71	(0.40, 1.25)	–	
7 + male partners	203 (45)	28 (30)	175 (48)	0.46	(0.28, 0.75)	0.71	(0.40, 1.27)
Any HIV-positive partners	66 (15)	12 (13)	54 (15)	0.85	(0.43, 1.65)	–	
Any HIV-negative partners	340 (75)	69 (74)	271 (75)	0.97	(0.57, 1.63)	–	
Any HIV-unknown partners	212 (47)	46 (49)	166 (46)	1.16	(0.73, 1.82)	–	
Sex with both male and female partners	51 (11)	31 (33)	21 (6)	7.73	(4.16, 14.36)	2.23	(1.02, 4.91)
Anal sex with male or female partners							
Any partners	366 (80)	74 (80)	292 (81)	0.93	(0.53, 1.65)	–	
Any HIV-positive partners	53 (12)	11 (12)	42 (12)	1.02	(0.50, 2.07)	–	
Any HIV-negative partners	307 (67)	60 (65)	247 (68)	0.85	(0.52, 1.37)	–	
Any HIV-unknown partners	182 (40)	43 (46)	139 (38)	1.38	(0.87, 2.18)	–	
Unprotected anal sex with male or female partners							
Any partners	311 (68)	62 (67)	249 (69)	0.91	(0.56, 1.47)	–	
Any HIV-positive partners	33 (7)	6 (6)	27 (7)	0.86	(0.34, 2.14)	–	
Any HIV-negative partners	262 (58)	51 (55)	211 (58)	0.87	(0.55, 1.38)	–	
Any HIV-unknown partners	134 (29)	36 (39)	98 (27)	1.70	(1.06, 2.74)	1.78	(1.01, 3.16)
Insertive anal sex with male or female partners							
Any partner	309 (68)	65 (70)	244 (67)	1.12	(0.69, 1.84)	–	
Any HIV-positive partners	46 (10)	10 (11)	36 (10)	1.09	(0.52, 2.29)	–	
Any HIV-negative partners	261 (58)	58 (62)	203 (56)	1.30	(0.81, 2.07)	–	
Any HIV-unknown partners	149 (33)	34 (37)	115 (32)	1.24	(0.77, 1.99)	–	
Unprotected insertive anal sex with male or female partners							
Any partners	258 (57)	52 (56)	206 (57)	0.96	(0.61, 1.52)	–	
Any HIV-positive partners	30 (7)	5 (5)	25 (7)	0.77	(0.29, 2.06)	–	
Any HIV-negative partners	215 (47)	46 (49)	169 (47)	1.12	(0.71, 1.76)	–	
Any HIV-unknown partners	109 (24)	29 (31)	80 (22)	1.60	(0.97, 2.65)	1.45	(0.80, 2.64)
Receptive anal sex with male partners							
Any partners	234 (51)	42 (45)	192 (53)	0.73	(0.46, 1.15)	–	
Any HIV-positive partners	28 (6)	5 (5)	23 (6)	0.84	(0.31, 2.27)	–	
Any HIV-negative partners	192 (42)	31 (33)	161 (44)	0.62	(0.39, 1.01)	–	
Any HIV-unknown partners	96 (21)	21 (23)	75 (21)	1.17	(0.65, 1.93)	–	
Unprotected receptive anal sex with male partners							
Any partners	182 (40)	32 (34)	150 (41)	0.74	(0.46, 1.19)	–	
Any HIV-positive partners	14 (3)	2 (2)	12 (3)	0.64	(0.14, 2.92)	–	
Any HIV-negative partners	151 (33)	25 (27)	126 (35)	0.69	(0.42, 1.14)	–	
Any HIV-unknown partners	65 (14)	16 (17)	49 (14)	1.33	(0.72, 2.46)	–	

<sup>a</sup> Multivariate analyses control for race/ethnicity, education, employment status, geographic region, and gay identity.

$F(3, 450) = 3.27, p < 0.05$ ). Differences in the perceived credibility of information from local AIDS organizations,  $F(9, 443) = 6.07, p < 0.0001$ , and the CDC,  $F(9, 444) = 2.68, p < 0.01$ ) remained significant in the multivariate analyses.

#### Connection with the Gay Community

The majority of DL-identified MSM reported one or more linkages to the gay community in the past year (Table 3). However, DL-identified MSM were less likely to report

**Table 3** Participation in HIV prevention activities and the gay community among MSM who self-identify as being on the down low and those who do not<sup>a</sup>

	Self-identify as down low					
	Total (n = 455)		Yes (n = 93)		No (n = 362)	
	n (%)	n (%)	n (%)	n (%)	Bivariate OR	Multivariate Adj. OR (95% CI)
Tested for HIV—Ever	412 (91)	76 (82)	336 (93)	0.35	(0.18, 0.67)	0.83 (0.37, 1.87)
Tested for HIV—Past year	337 (74)	71 (76)	266 (73)	1.17	(0.68, 1.98)	—
Any participation in HIV prevention activities in past year	402 (88)	80 (86)	322 (89)	0.76	(0.39, 1.50)	—
Attended safer sex workshop	59 (13)	19 (20)	40 (11)	2.07	(1.13, 3.77)	0.98 (0.48, 2.02)
Attended community HIV forum	71 (16)	16 (17)	55 (15)	1.16	(0.63, 2.14)	—
Read HIV-related publication	254 (56)	42 (45)	212 (59)	0.58	(0.37, 0.92)	0.60 (0.34, 1.04)
Looked at HIV prevention brochure	256 (56)	48 (52)	208 (57)	0.79	(0.50, 1.25)	—
Looked at website with HIV prevention info.	178 (39)	30 (32)	148 (41)	0.69	(0.43, 1.17)	—
Read news or magazine article about HIV prevention	298 (65)	53 (57)	245 (68)	0.63	(0.40, 1.01)	0.66 (0.38, 1.16)
Viewed TV show/announcement about HIV prevention	230 (51)	42 (45)	188 (52)	0.76	(0.48, 1.20)	—
Other	68 (15)	10 (11)	58 (16)	0.63	(0.31, 1.29)	—
Any participation in the gay community in past year	422 (93)	76 (82)	346 (96)	0.21	(0.10, 0.43)	0.58 (0.24, 1.40)
Attended gay pride parade or festival	282 (62)	37(40)	245 (68)	0.32	(0.20, 0.51)	0.60 (0.34, 1.04)
Belonged to gay club, professional group, or community organization	130 (29)	12 (13)	118 (33)	0.31	(0.16, 0.58)	0.74 (0.35, 1.59)
Went to gay bar/nightclub	352 (77)	46 (50)	306 (85)	0.18	(0.11, 0.29)	0.44 (0.24, 0.82)
Went to support group for gay men	88 (19)	11 (12)	77 (21)	0.50	(0.25, 0.98)	0.75 (0.34, 1.64)
Worked out at gay gym	104 (23)	16 (17)	88 (24)	0.65	(0.36, 1.17)	—
Read a gay newspaper	345 (76)	47 (51)	298 (82)	0.22	(0.14, 0.36)	0.49 (0.26, 0.90)
Logged on to gay website or chat room	295 (65)	38 (41)	257 (71)	0.28	(0.18, 0.45)	0.50 (0.28, 0.88)
Other	71 (16)	13 (14)	58 (16)	0.85	(0.45, 1.63)	—

<sup>a</sup>Multivariate analyses control for race/ethnicity, education, employment status, geographic region and gay identity.

having had any involvement with the gay community. DL-identified MSM also reported fewer linkages to the gay community ( $M = 2.4$ ,  $SD = 1.8$ ) compared to non-DL MSM ( $M = 4.0$ ,  $SD = 1.8$ ; unadjusted  $\chi^2 = 65.95$ ,  $p < 0.0001$ ; adjusted  $\chi^2 = 8.20$ ,  $p < 0.005$ ).

## DISCUSSION

The results of this study are subject to at least five limitations. First, results are based on a convenience sample of MSM who were largely recruited through sources identified with the gay community. Thus, results may not generalize to all MSM, and DL MSM with fewer ties to the gay community are likely under-represented. Second, all participants had to report unprotected anal sex in the past 6 months to be eligible for the study. Nongay-identified MSM are less likely than gay-identified MSM to report anal intercourse with male partners (Doll, Petersen, White, Johnson, and Ward, 1992; Goldbaum *et al.*, 1998). If such differences were present in the populations sampled, they would have differentially affected eligibility of DL-identified and non-DL MSM, and thus, the generalizability of findings. For example, differences in unprotected anal sex may have been observed between DL-identified and non-DL MSM if this had not been part of the eligibility criteria. Third, the exclusion of Asian American, Native American, and other racial/ethnic groups from this study further limits the generalizability of study findings. Fourth, the decision to focus on self-identity and not to define DL for participants means that some participants likely defined the term differently than others. The lack of qualitative information about the ways in which participants defined this term limits our understanding of its meaning in these men's lives and needs to be addressed in future research. Finally, the decision to include men who were unaware of the term DL in the analysis raises concerns about possible misclassification. This decision was based on our interest in differences between men who label themselves as DL versus those who do not apply this label to themselves (including those who were unaware of the term). Differences between analyses that excluded men who were unaware of the DL (Jones, Wolitski, Wasserman, and Smith, 2005; Wolitski, Wasserman, Jones, and Jenkins, 2005) and the present analyses that did not exclude these men were minimal and did not lead to different conclusions or recommendations.

Despite these limitations, these findings suggest that earlier reports may have failed to adequately describe the diversity of MSM who self-identify as DL. Although DL-identified MSM are more likely than non-DL MSM to be Black and to not identify as gay, these characteristics were not common to all DL-identified MSM in this study. A considerable number of DL-identified MSM were Hispanic,

some were White, and one-third (29/93) identified as gay. Contrary to anecdotal reports, few DL-identified MSM in this study currently had a female main partner—most female partners reported by these men were nonprimary partners.

The diversity observed in this sample clearly suggests that much more remains to be learned about the experiences of DL MSM, the factors that influence the adoption of this self-label, and the role that it plays in the lives of these men. Other factors beyond the scope of this study (particularly participants' desire to limit others' knowledge about their same-sex encounters) may be more strongly associated with the adoption of DL identity. Future research should attempt to identify common characteristics that are central to considering oneself to be DL so that the prevention needs of these men can be more fully understood and improved strategies for reaching this subgroup of MSM can be developed. Although this study identified significant differences between DL-identified and non-DL MSM, the heterogeneity of men who considered themselves to be on the DL further demonstrates the importance of focusing prevention messages on specific risk behaviors rather than self-defined identities that can mean different things to different people.

DL-identified MSM in this study were at greater risk than non-DL MSM for acquiring HIV from, or transmitting it to, female partners. Nearly two-thirds of DL-identified MSM had sex with a woman in the past 6 months, and 1-in-4 had unprotected vaginal intercourse in the prior 30 days. Few had a female main partner, but two-thirds of those who did indicated that she did not know about their sexual encounters with other men. Prevention programs for MSM with female partners should encourage these men to take action to reduce the risk that their behavior poses to themselves and their female partners. In addition, these programs should promote the disclosure of same-sex encounters to female partners who cannot accurately assess their own risk without this information. Although the disclosure of same-sex encounters is likely to be difficult and may significantly disrupt these relationships or result in their termination, the risk of HIV infection among behaviorally bisexual MSM warrants disclosure (Centers for Disease Control and Prevention, 2003a). Bisexual men's disclosure of same-sex encounters to female partners has been associated with increased condom use with female partners (Wolitski *et al.*, 1996).

In general, differences in sexual practices with male partners were not observed between DL-identified and non-DL MSM. However, DL-identified MSM were more likely to report unprotected anal sex with male or female partners whose HIV status they did not know. Prevention programs for DL and other MSM with female partners must address not only the risk of HIV transmission to female partners, but also the risk of these men for acquiring HIV. Such

programs should encourage sexually active MSM to: (1) know and disclose their HIV status to potential partners, (2) ask potential partners about their status, (3) limit sex to one seroconcordant partner, (4) avoid high-risk sexual practices, and (5), if they have anal or vaginal sex, to use condoms every time they engage in this behavior. At present, no rigorously evaluated intervention has been shown to be effective specifically with DL-identified MSM. Until such interventions exist, interventions for DL-identified MSM should be based on models that have been shown to be effective with other MSM (see CDC, 2001; Kay, Lyles, Crepaz, Herbst, and Britton, 2005).

The present findings provide information about the HIV information sources of DL MSM and suggest that DL-identified MSM may be more likely than other MSM to question the trustworthiness of HIV information from some sources. DL-identified MSM rated the trustworthiness of information from their health care provider higher than information from local AIDS organizations or the CDC. Patients often consider their health care providers to be trusted sources of health information (David and Boldt, 1980), but many providers fail to address HIV risk and its prevention during clinical encounters (Dodge *et al.*, 2001; Gerbert, Maguire, and Coates, 1990; Margolis, Wolitski, Parsons, and Gomez, 2001; Marks *et al.*, 2002; Metsch *et al.*, 2004; Wenrich, Carline, Curtis, Paauw, and Ramsey, 1996). Brief patient-provider interactions are feasible, generally acceptable to patients, and can motivate patients to reduce HIV risk (Dodge *et al.*, 2001; Gerbert *et al.*, 1990; Richardson *et al.*, 2004). Providers should routinely assess the HIV risk of their patients and counsel sexually active patients who are at-risk of contracting or transmitting HIV to abstain from sex, be faithful to one partner, use condoms, or avoid high-risk behaviors (US Preventive Services Task Force, 1996; Centers for Disease Control and Prevention, 2003b). It is important that providers base their recommendations on patient-reported *behaviors*, not their identification as gay, straight, or bisexual. Providers should encourage all susceptible MSM, regardless of sexual identity, to be tested for HIV at least annually (Centers for Disease Control and Prevention, 2002). There is a need for additional effort to promote annual testing among MSM:1-in-4 men in this study (all of whom had unprotected anal sex in the past 6 months) had not been tested in the last year.

The finding that DL-identified MSM have higher levels of internalized homophobia may suggest that these men are less comfortable than non-DL MSM with their attraction to other men and may hide these behaviors because of shame, guilt, or other negative feelings that they associate with having a gay or bisexual identity. Having a gay identity that is integrated with one's racial/ethnic identity has been associated with greater HIV prevention self efficacy and lower risk of HIV risk behavior among MSM of color (Crawford,

Allison, Zamboni, and Soto, 2002; Chng and Geliga-Vargas, 2000). Health care providers should refer DL MSM who experience anxiety about their sexual identity or practices to mental health providers who are skilled at addressing these issues.

In some cases, bivariate analyses revealed differences between DL-identified and non-DL MSM that were not significant when gay identity, race/ethnicity, education, employment, and geographic region status were controlled for. These findings indicate that some of the differences in sexual practices and access to HIV prevention were not associated with DL identity *per se*, but rather with characteristics associated with identifying as DL, such as nongay identity and Black or Hispanic race/ethnicity. Thus, in these cases, DL-identity did not account for additional variance over and above that which could already be accounted for by other variables in the models. Findings from the bivariate analyses are most useful for public health efforts to reduce HIV risk among DL MSM. Findings from the multivariate analyses are more useful for better understanding the unique effects of DL identity that are independent of other variables that some have used to define DL and those that are not likely to be central to understanding this construct (e.g., employment, education).

It is important to recognize that the DL phenomenon is not necessarily a new one. What is new is the use of this specific label and the recognition of the HIV risk of DL MSM and their partners, which has fueled intense public debate and media interest in this population. This study demonstrates that at least some at-risk MSM who consider themselves to be on the DL can be recruited to participate in research studies and that HIV prevention messages have reached some of these men. Despite the fact that some DL MSM are being reached, there is a need for public health programs to more effectively motivate the adoption and maintenance of effective risk reduction strategies in this population. If successful, these programs could have a substantial impact on the course of the HIV epidemic, particularly among Black and Hispanic MSM, their partners, and their communities.

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