

UCLA

Other Recent Work

Title

Patterns and Predictors of Disclosure of Sexual Orientation to Healthcare Providers among Lesbians, Gay Men, and Bisexuals

Permalink

<https://escholarship.org/uc/item/08b546b6>

Authors

Durso, Laura E.
Meyer, Ilan

Publication Date

2012-12-01

Peer reviewed

Patterns and Predictors of Disclosure of Sexual Orientation to Healthcare Providers Among Lesbians, Gay Men, and Bisexuals

Laura E. Durso · Ilan H. Meyer

© Springer Science+Business Media New York 2012

Abstract The present study sought to identify patterns and predictors of disclosure of sexual orientation to healthcare providers among lesbian, gay, and bisexual (LGB) adults. Respondents were 396 self-identified LGB individuals ages 18–59, recruited from diverse community venues in New York City, with equal numbers of men and women and Whites, Blacks, and Latinos. Respondents were interviewed at baseline and 1-year follow-up. We assessed the relationships among disclosure of sexual orientation, demographic characteristics, health, and minority stress. Rates of nondisclosure to healthcare providers were significantly higher among bisexual men (39.3 %) and bisexual women (32.6 %) compared with gay men (10 %) and lesbians (12.9 %). Bivariate and multivariate logistic regression models predicting disclosure of sexual orientation indicated that patient age, level of education, immigration status, medical history, level of internalized homophobia, and degree of connectedness to the LGBT community were significant factors, along with sexual identity. Nondisclosure of sexual orientation was related to poorer psychological well-being at 1 year follow-up. Our findings suggest that interventions targeting sexual minorities ought to carefully tailor messages to subpopulations. In particular, interventionists and clinicians ought to be mindful of differences between bisexually and gay/lesbian-identified individuals.

Keywords Healthcare · Doctor–patient communications · Lesbians · Gay men · Bisexuals

L. E. Durso (✉) · I. H. Meyer
The Williams Institute, UCLA School of Law, P.O. Box 951476,
Los Angeles, CA 90095-1476, USA
e-mail: durso@law.ucla.edu

Introduction

Sexual minorities have worse health outcomes and risk behaviors when compared with heterosexual men and women (Institute of Medicine (2011); U.S. Department of Health and Human Services (DHHS), Health Resources and Services Administration 2011). For example, compared with heterosexual women, bisexual women are less likely to have health insurance and less likely to report being in good health (DHHS 2011). Lesbians are at higher risk than heterosexual women for obesity, breast cancer, and polycystic ovarian syndrome, and are less likely to seek preventative care (IOM 2011; Heck et al. 2006). Gay and bisexual men are at greater risk than heterosexual men for developing anal cancer (IOM 2011). Sexual minorities are at greater risk than heterosexuals for a variety of mental disorders, including anxiety, mood, and substance use disorders and suicide attempts (Herek and Garnets 2007; King et al. 2008; Meyer 2003) and are more likely than heterosexuals to smoke cigarettes, a risk factor for many disorders (Conron et al. 2010; DHHS 2011; IOM 2011).

Although understudied, evidence suggests the health of bisexual men and women may be worse than lesbians or gay men. For example, compared with lesbians, bisexual women are less likely to have health insurance, are more likely to be current smokers and to binge drink, have worse self-reported general health, and report more perceived stress and depressive symptoms (Fredriksen-Goldsen et al. 2011; Lindley et al. 2011). These findings suggest that research on health disparities facing sexual minority populations ought to consider the ways in which gay, lesbian, and bisexual subpopulations differ from each other.

Among the factors that may contribute to poor health among lesbian, gay, and bisexual (LGB) people is nondisclosure of LGB identity to healthcare providers. For example, healthcare providers who are unaware of a patient's sexual

orientation may not educate the patient about relevant issues, even if they are knowledgeable about health issues affecting sexual minority populations. One estimate suggests that less than 20 % of healthcare providers provide medical information related to the sexual behaviors of their sexual minority patients (Labig and Peterson 2006). Conversely, healthcare providers who were aware that their male patients had same-sex sex partners were more likely to recommend testing and vaccinations for HIV and other sexually transmitted infections (Petroll and Mosack 2011).

Although patients report a desire for their healthcare providers to know their sexual orientation (Stein and Bonuck 2001), a significant proportion of LGB adults do not disclose their sexual orientation in healthcare settings (Bernstein et al. 2008; Boehmer and Case 2004; Eliason and Schope 2001; Petroll and Mosack 2011; Stein and Bonuck 2001). One study has compared disclosure rates between gay men and bisexual men (Bernstein et al. 2008), demonstrating that bisexual men are less likely to disclose (indeed, none of the bisexual men in the sample had disclosed). Evidence is mixed on whether sexual minority men disclose more or less often than sexual minority women (Eliason and Schope 2001; Klitzman and Greenberg 2002; Stein and Bonuck 2001).

Nondisclosure to providers may be the result of patients' fears of being mistreated, patients' perceptions that sexual orientation is irrelevant to healthcare, and/or privacy concerns (Barbara et al. 2001; Boehmer and Case 2004; St. Pierre 2012; Stein and Bonuck 2001). Among lesbians, disclosure to healthcare providers is related to a woman's health status, relationship status, and level of internalized homophobia (St. Pierre 2012). Nondisclosure to healthcare providers is also more likely among LGB people who are ethnic minorities (Bernstein et al. 2008; Petroll and Mosack 2011), have lower incomes (Petroll and Mosack 2011; St. Pierre 2012), live in rural areas, or have low education (Petroll and Mosack 2011).

Disclosure of sexual orientation may also be related to an LGB individual's experiences of minority stress. Minority stress theory posits that LGB-identified people are under unique and chronic stress because of their minority status and that this stress contributes to the development of poor health (Frost et al. 2011; Meyer 1995, 2003). Though studies have explored the relationship between elements of the minority stress model (e.g., internalized homophobia, experiences of discrimination) and health, we are aware of no study comparing the relative contribution of minority stress to predicting disclosure of sexual orientation to healthcare providers.

While patients may perceive a risk to disclosing their sexual orientation to healthcare providers, they also dislike when healthcare providers presume that they are heterosexual (Barbara et al. 2001) and believe that disclosure is related to increased honesty and improved care (Stein and Bonuck 2001). Indeed, facilitation of disclosure by

healthcare providers is seen as part of culturally competent care (The Fenway Institute 2012; The Joint Commission 2011). Thus, it is important to understand the conditions under which patients fail to disclose their sexual orientation so that interventions can be developed to promote patients' disclosure and healthcare providers' facilitation of disclosure of sexual minority identity.

We aim to add to this knowledge. We first describe patterns of disclosure among LGB individuals. Next we assessed for differences in nondisclosure related to patients' age, race/ethnicity, level of education, relationship status, immigration status, employment status, and whether he or she had children. We then compared the relative contribution of these factors to the prediction of disclosure to healthcare providers to test the following hypotheses: (a) greater experiences of minority stress are associated with nondisclosure of sexual orientation; (b) a stronger sense of LGBT identity and greater connection to the LGBT community is associated with disclosure of sexual orientation; and (c) nondisclosure of sexual orientation is related to poorer health at follow-up.

Methods

Participants and Procedures

Data for the present study were drawn from Project Stride, a large epidemiological study exploring the relationships between stress, identity, and mental health among LGB and heterosexual populations in New York City. A variety of venues (e.g., coffee shops, social groups, parks) were used to recruit a sample of participants, with equal numbers of men and women, LGB and straight individuals, and White, Black, and Latino individuals aged 18–59. Recruitment was successful at including participants from 128 different New York City zip codes, representing diverse neighborhoods. The present sample includes 396 LGB individuals (mean age=32.43 years; SD=9.24 years). Participants were interviewed by trained interviewers at baseline and 1-year follow-up. The response rate was 79 %, calculated based on the formula developed by the American Association for Public Opinion Research (AAPOR) as the proportion of interviewed respondents out of all the individuals who were interviewed and those who refused. The cooperation rate was 60 %, calculated as the proportion of interviewed respondents out of all the eligible individuals who were interviewed, those who refused, and the eligible individuals whom interviewers were unable to contact (AAPOR 2005; formulas RR2 and COOP2, respectively). Response and cooperation rates did not vary significantly by sexual orientation, race or ethnic group, or gender. Data were gathered through in-person interviews using computer-assisted

personal interviewing; 94.3 % of participants who completed baseline interview was re-interviewed at 1-year follow-up. Interviews were conducted at one of two research offices, though to maximize retention of participants; a small number took place in other private locations (e.g., the respondent's home) or over the phone. Baseline interviews lasted a mean of 3.82 h (SD=55 min), with follow-up interviews lasting a mean of 1.91 h (SD=30 min). More information about the study and the methods is available at <http://www.columbia.edu/~im15/>. Procedures were approved by the Western Institutional Review Board and the Institutional Review Board of Columbia University Medical Center.

Measures

Dependent Variable

Disclosure of Sexual Orientation Participants were asked to report the degree of disclosure of their sexual orientation to family, heterosexual friends, LGB friends, co-workers, and healthcare providers using a scale from 1 (“out to none”) to 4 (“out to all”; Meyer et al. 2002). We coded the responses as a dichotomous variable, indicating the participant was out “none” versus “any” individuals per category.

Minority Stress Measures

Everyday Discrimination We assessed chronic or routine experiences of unfair treatment, such as being treated with less courtesy or being threatened or harassed (Williams et al. 1999). Eight statements assessed the frequency of discriminatory experiences over the participant's lifetime (e.g., “How often have you been treated with less respect than others?”), rated on a 4-point scale from “never” to “often” (Cronbach's alpha=0.85). Items were adapted so that each statement applied to all the minority groups in the study (i.e., gender, racial/ethnic, and sexual minority identities), and respondents were asked to state whether these experiences of unfair treatment were related to their sexual orientation, gender, ethnicity, race, age, religion, physical appearance, income or social class, or some other form of discrimination.

Internalized Homophobia We used a 10-item scale (Herek and Glunt 1995; Martin and Dean 1987) to assess the degree to which an LGB participant accepted his or her sexual orientation, for example, “How often have you wished you weren't gay?” Items were rated on a 4-point scale from “often” to “never” (Cronbach's alpha=0.84).

Expectations of Stigma We assessed the degree to which a participant expects to be rejected or discriminated against based on his or her sexual orientation. Participants rated their

degree of agreement with six statements (e.g. “Most people would willingly accept someone like me as a close friend”) on a 4-point scale ranging from “strongly agree” to “strongly disagree” (adapted from Link 1987; Cronbach's alpha=0.88).

Identity and Community Measures

Strength of LGB Identity Participants were asked to rate on a single 4-point scale the extent to which they felt “close in their ideas and feelings to the LGBT community” from “very close” to “not close at all” (see Frost and Meyer 2012).

Connectedness to the LGBT Community An 8-item scale of community cohesion, with the addition of a single item taken from the Community Consciousness Scale (Herek and Glunt 1995) was used to assess a participant's affiliation to the LGBT community (e.g., “You feel a bond with other [matched the identity label the respondent gave].”; see Frost and Meyer 2012). Participants rated their agreement with each statement on a 4-point scale, ranging from “agree strongly” to “disagree strongly” (Cronbach's alpha=0.81).

Coming Out Milestone Participants were asked at what age they had disclosed their sexual orientation to an LGB friend. Time since that disclosure was calculated by subtracting that age from the participant's age at the time of the interview.

Health Measures

Medical Outcomes Study Short-Form (SF-12) The SF-12 (Ware et al. 2002) is a widely used 12-item measure of health-related quality of life. Items are summarized into two scales representing perceived impairment in functioning associated with physical health problems and mental health problems (e.g., “During the past 4 weeks, how much of the time have you accomplished less than you would like with your work or other regular activities as a result of any emotional problems?”). Participants responded on a 5-point scale to indicate the frequency of each item. The SF-12 has been used in prior research using samples of LGB-identified adults (e.g., Meyer et al. 2002).

Psychological Well-Being We assessed the psychological well-being dimensions of self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff 1989; Ryff and Keyes 1995). Respondents rated their agreement with each of 18 items and summed as a total score (Cronbach's alpha=0.75; Sample item=“When I look at the story of my life, I am pleased with how things have turned out so far.”). This measure has shown good reliability in other samples of LGB individuals (e.g. Lease et al. 2005; Riggle et al. 2009).

History of Illness Participants were also asked whether they had ever been told by a healthcare professional that they had any of 19 different physical conditions (e.g., asthma, hypertension, HIV) or a mental illness or substance use disorder. Participants who endorsed any of the listed physical or mental health conditions were coded as having a physical or mental health history.

Demographic Characteristics

Participants reported their sexual orientation, gender, age, and race/ethnicity, education level, employment status, economic status, country of birth, and whether they were in an intimate relationship and/or had children.

Sexual orientation identity was assessed by self-report. Participants may have used various labels to refer to a gay or lesbian identity (e.g., homosexual), but for the purpose of grouping here we coded them “gay,” “lesbian,” or “bisexual.”

As we were interested in the contributions of racial/ethnic minority identity to disclosure, rather than differences among racial/ethnic groups, we dichotomized race/ethnicity and coded as White versus Black or Latino (“person of color”). Education was dichotomized as less than completed college or attained a BA degree or higher. We categorized participants as unemployed if they had no job and were looking for one, excluding non-employed individuals not looking for a job (e.g., retired, full-time student).

Economic status was measured as negative versus positive net worth by adding all participants’ debt and assets and determining if after paying all debts, they had money left over or owed money (Conger et al. 2002). Net worth was coded as one if the participant owed money (negative net worth) and zero if he or she had money left over (positive net worth).

Respondents were also asked if they were currently in a relationship or felt a special commitment to someone. Relationship status was coded as one if the participant said yes and coded zero if they said no. Similarly, participants were asked if they had any children (including living biological children, step children, adopted children, or children the participant helped raise for five or more years) and those

responding yes were coded as one, while those responding no were coded as zero.

Results

Disclosure in Interpersonal Relationships (Baseline Assessment)

LGB participants were less likely to have disclosed their sexual orientation to healthcare providers and to their co-workers, and more likely to be out to their family, heterosexual friends, and LGB friends (Table 1). In all but one comparison, bisexual men and women were significantly less likely to have disclosed their sexual identity than gay men and lesbians. Table 2 presents the proportion of non-disclosure to any healthcare providers by demographic characteristics.

Predictors of Nondisclosure to Healthcare Providers (Baseline Assessment)

A logistic regression analysis predicting nondisclosure to healthcare providers based on participant gender was found to be nonsignificant ($\chi^2=0.68$, $p=0.41$), indicating that women were as equally likely as men to have not disclosed their sexual orientation to any healthcare providers. However, while disclosure did not vary between men and women, the predictors of disclosure may still differ, and thus we present the following analyses of lesbians and bisexual women separately from gay and bisexual men.

Lesbians and Bisexual Women Bivariate logistic regression predicting nondisclosure among all women (i.e., lesbians and bisexual women together) showed that correlates of nondisclosure included having a bisexual identity (OR=3.26, 95 % CI=1.48–7.20), being a woman of color (OR=2.76, 95 % CI=1.08–7.05), not graduating from college (OR=3.25, 95 % CI=1.39–7.60), and having children (OR=2.24, 95 % CI=1.04–4.85). Table 2, which displays differences *between* lesbians and bisexual women, shows that there were no significant differences among subgroups

Table 1 Rates of nondisclosure of sexual orientation among LGB men and women within interpersonal relationships

Relationship	Women (% not out)			Men (% not out)		
	Lesbian	Bisexual	χ^2 (1, $n=198$)	Gay	Bisexual	χ^2 (1, $n=198$)
Healthcare providers	12.9	32.6	9.14**	10.0	39.3	16.98***
Family	5.2	25.6	16.18***	8.8	21.4	4.03*
Heterosexual friends	1.9	9.3	5.36*	5.9	21.4	7.82**
LGB friends	0.0	0.0	na	0.0	3.6	6.01*
Co-workers	13.5	48.8	25.08***	11.2	42.9	18.27***

LGB lesbian, gay, bisexual, % percent, na not applicable

* $p<0.05$; ** $p<0.01$; *** $p<0.001$

Table 2 Nondisclosure to healthcare providers (HCPs) among LGB individuals by demographic characteristics ($n=396$)

	All women ($n=198$)	Women not out to HCPs ($n=198$)	All men ($n=198$)	Men not out to HCPs ($n=198$)
Age (mean, SD)	34.42 (9.62)	32.40 (9.37)	32.44 (8.88)	29.0 (9.80)*
Years since coming out (mean, SD)	12.17 (8.83)	12.00 (10.77)	12.99 (8.41)	8.12 (8.59)***
	% of All Women	% Not Out to HCPs	% of All Men	% Not Out to HCPs
Self-identification				
Lesbian/gay (LG) vs. bisexual	78.3 vs. 21.7	12.9 vs. 32.6**	85.9 vs. 14.1	10.0 vs. 39.3***
Race/ethnicity				
LG person of color vs. white	49.5 vs. 28.8	17.3 vs. 5.3*	54.0 vs. 31.8	13.1 vs. 4.8
Bisexual person of color vs. white	16.7 vs. 5.1	33.3 vs. 30.0	12.1 vs. 2.0	37.5 vs. 50.0
Educational attainment				
LG with <BA vs. ≥BA	41.4 vs. 36.9	18.3 vs. 6.8	39.4 vs. 46.5	11.5 vs. 8.7
Bisexual with <BA vs. ≥BA	13.1 vs. 8.6	42.3 vs. 17.6	10.1 vs. 4.0	35.0 vs. 50.0
Net worth				
LG owes money vs. money left over	34.3 vs. 43.9	16.1 vs. 8.8	44.4 vs. 41.4	9.1 vs. 11.0
Bisexual owes money vs. money left over	7.6 vs. 14.1	35.7 vs. 26.7	9.1 vs. 5.1	27.8 vs. 60.0
Relationship status				
LG single vs. partnered	33.3 vs. 44.9	9.1 vs. 15.7	56.6 vs. 29.3	9.8 vs. 10.3
Bisexual single vs. partnered	10.6 vs. 11.1	38.1 vs. 27.3	6.6 vs. 7.6	38.5 vs. 40.0
Parental status				
LG with vs. without children	16.7 vs. 61.6	27.3 vs. 9.0**	6.1 vs. 79.8	16.7 vs. 9.5
Bisexual with vs. without children	10.1 vs. 11.6	25.0 vs. 39.1	2.0 vs. 12.1	25.0 vs. 41.7
Employment status				
LG employed vs. unemployed	54.5 vs. 23.7	11.1 vs. 17.0	67.7 vs. 18.2	9.0 vs. 13.9
Bisexual employed vs. unemployed	14.1 vs. 7.6	35.7 vs. 26.7	8.1 vs. 6.1	37.5 vs. 41.7
Immigration status				
LG born in vs. outside USA	65.2 vs. 13.1	10.1 vs. 26.9*	68.2 vs. 17.7	7.4 vs. 20.0
Bisexual born in vs. outside USA	20.7 vs. 1.0	31.7 vs. 50.0	11.6 vs. 2.5	34.8 vs. 60.0

See statistics for significant results in text

* $p<0.05$; ** $p<0.01$; *** $p<0.001$

of bisexual women on any of the demographic categories examined. In contrast, among lesbians, nondisclosure was more prominent among women of color compared with White women ($\chi^2=4.68$, $p=0.03$), women who were born outside of the USA compared with those who were born in the USA ($\chi^2=5.46$, $p=0.02$), and lesbians with children compared with those without children ($\chi^2=7.70$, $p=0.01$).

Examining minority stress, bivariate logistic regression results showed that women who reported a higher (compared with lower) level of internalized homophobia were less likely to have disclosed (OR=2.28, 95 % CI=1.16–4.51), and women who reported lesser (compared with greater) connection to the LGBT community were also less likely to have disclosed their sexual orientation (OR=0.41, 95 % CI=0.21–0.82). Health history was not a significant predictor of disclosure in the bivariate analysis (diagnosis of physical condition OR=0.59, 95 % CI=0.26–1.32; diagnosis of mental illness OR=0.91, 95 % CI=0.44–1.91).

However, in a multivariate logistic regression model (Table 3), lower education, immigration status, and having a history of a medical condition were the significant predictors explaining nondisclosure.

Gay and Bisexual Men Men who had not disclosed to their healthcare providers were younger than men who disclosed ($M=29.0$, $SD=9.80$ and $M=33.01$, $SD=8.62$, respectively, $t(196)=2.24$; $p=0.03$). In addition, men who had not disclosed to their healthcare provider were older when they had come out to an LGB friend than men who had disclosed (M [years since coming out]=8.12, $SD=8.59$ versus $M=13.77$, $SD=8.59$, respectively, $t(187)=3.27$; $p<0.001$). Bivariate logistic regression models indicated that bisexually-identified men (OR=5.82, 95 % CI=2.35–14.45) or men who were born outside of the USA were significantly less likely to have disclosed their sexual orientation to healthcare providers (OR=2.59, 95 % CI=1.09–6.18). In addition,

Table 3 Association between demographic characteristics, minority stress, community connectedness, and nondisclosure ($n=396$)—adjusted odds ratios (95 % CI)

	Women	Men
Sexual orientation self-identification		
Bisexual vs. lesbian/gay	2.63 (0.93–7.44)	1.95 (0.54–6.71)
Demographic variables		
Person of color	2.35 (0.65–8.44)	1.63 (0.42–6.31)
< Bachelor's degree	3.04 (1.03–9.00)*	0.75 (0.22–2.55)
In a relationship	1.44 (0.58–3.57)	1.13 (0.40–3.19)
Employed	1.39 (0.50–3.87)	0.42 (0.14–1.30)
Negative net worth (owes \$)	1.52 (0.60–3.87)	0.58 (0.21–1.61)
Born outside the USA	4.80 (1.51–15.21)**	1.98 (0.57–6.88)
Has children	1.21 (0.42–3.51)	1.23 (0.24–6.37)
Health history		
Diagnosis of physical condition	0.32 (0.12–0.87)*	1.18 (0.37–3.79)
Diagnosis of mental illness	1.14 (0.46–2.88)	1.42 (0.45–4.53)
Minority stressors		
Internalized homophobia	1.44 (0.61–3.44)	2.90 (1.12–7.47)*
Expectations of stigma	1.0 (0.49–2.04)	0.82 (0.45–1.93)
Everyday discrimination	0.99 (0.45–2.21)	0.48 (0.16–1.49)
Salience of sexual orientation		
Strength of LGB identity	1.07 (0.51–2.27)	0.76 (0.33–1.76)
Connectedness to the LGBT community	0.42 (0.14–1.22)	0.69 (0.22–2.18)
Time since coming out	1.03 (0.98–1.09)	0.92 (0.85–1.0)*
Constant	0.17	4.35

Odds ratios adjusted for all variables in model. *CI* confidence interval, *LGBT* lesbian, gay, bisexual, and transgender

* $p<0.05$; ** $p<0.01$; *** $p<0.001$

men who had come out to an LGB friend more recently were less likely to disclose than their counterparts (OR=0.89, 95 % CI=0.83–0.96).

Looking at minority stress, bivariate logistic regression models showed that men who reported a higher (compared with lower) level of internalized homophobia were significantly less likely to have disclosed (OR=4.07, 95 % CI=2.12–7.83), and men with a greater (compared with lesser) connection to the LGBT community were more likely to have disclosed their sexual orientation to any healthcare provider (OR=0.44, 95 % CI=0.22–0.86). Data from the multivariate analysis suggest that greater internalized homophobia and lesser time since coming out to an LGB friend were the most significant predictors of nondisclosure; other variables did not have a significant impact on nondisclosure (Table 3).

Nondisclosure and Health Outcomes (Baseline and 1-Year Follow-up Assessments)

We tested whether nondisclosure at baseline was related to worse health outcomes in the year following the interview. We used three health indicators measured at time 2 (a year after baseline): SF-12 physical health, SF-12 mental health, and psychological well-being. In three separate multiple linear regression analyses, health outcomes were included

as the dependent variable. The predictor was disclosure to healthcare providers. By controlling for baseline health outcome (SF-12 physical health, SF-12 mental health, and psychological well-being, respectively), we were able to assess the impact of nondisclosure on change in health outcomes.

Lesbians and Bisexual Women In the analyses predicting SF-12 physical and mental health, only participant's respective baseline SF-12 scores were significant and independent predictors of health outcome at follow-up, indicating that disclosure had no significant impact on health outcome measured by the SF-12 (data not shown). For psychological well-being, the overall model was found to be significant and accounted for 47.8 % of the variance in psychological well-being at follow-up ($F(2,184)=82.36$; $p<0.001$). Nondisclosure was a significant predictor of psychological well-being at follow-up ($\beta=0.15$; $p<0.01$) independent of baseline psychological well-being scores ($\beta=0.66$; $p<0.001$).

Gay and Bisexual Men In the analyses predicting SF-12 physical and mental health, as well as psychological well-being, only participant's respective baseline health outcomes were significant and independent predictors of health outcomes at follow-up, indicating that disclosure had no significant impact on these health outcomes (data not shown).

Discussion

Our findings suggest that there are significant differences in disclosure to healthcare providers based on a participant's sexual identity, with bisexually identified individuals less likely than gay- or lesbian-identified individuals to disclose their sexual minority identity to a healthcare provider. This suggests that bisexually-identified individuals, who outnumber lesbians and gay men in the U.S. population (Gates 2011), may present unique challenges in the healthcare environment. This finding adds to a number of recent studies that indicate that researchers and public health interventionists ought to carefully examine which issues are unique to bisexuals and which are common to all LGB individuals.

Our results show that disclosure is also affected by a number of patient characteristics, including gender, race/ethnicity, education level, immigration status, parenthood status, and health history. However, this seems to be related to variability in the gay/lesbian groups more than the bisexual group. Specifically, among lesbians, disclosure patterns varied. Lesbians of color, lesbians who had immigrated to the USA, and lesbians with children were significantly less likely to have disclosed to healthcare providers than their counterparts. This supports and expands previous research on factors related to disclosure among lesbians (St. Pierre 2012) and suggests that interventions addressing the issue of disclosure to healthcare providers consider the heterogeneity of this population. Researchers' tendency to only compare heterosexual and nonheterosexual study participants may obscure meaningful differences within the LGB population. As a result, the healthcare experiences and needs of individuals who identify with multiple minority or stigmatized groups, such as women of color or immigrant women, may go unaddressed.

Of the minority stress processes we tested, internalized homophobia was related to disclosure to healthcare providers among both men and women, while expectations of rejection and discrimination and past experiences with discrimination did not significantly predict disclosure. Relatedly, connectedness to the LGBT community was associated with a greater likelihood of disclosure to healthcare providers. These findings suggest that, at least within this sample, disclosure may be more strongly related to the internal process of identity development and the negotiation of both personal and social identity. This finding runs counter to previous theorizing that patients do not disclose their sexual orientation for fear of experiencing discrimination in healthcare settings or because of a fear of mistreatment or rejection following disclosure (e.g., Boehmer and Case 2004; Stein and Bonuck 2001). It may be the case that patients who anticipate discrimination by providers

simply do not seek out healthcare in order to avoid disclosure (van Dam et al. 2001), while different factors mediate disclosure among those patients already engaged in care.

Limitations of the present study should be noted. Among the health outcomes, nondisclosure at baseline significantly predicted change in psychological well-being at follow-up, echoing research demonstrating the negative psychological effects of concealing one's sexual orientation (Pachankis 2007). However, nondisclosure was not related to follow-up assessment of other health outcomes. It is possible that physical health effects of concealment take longer to manifest than the one year follow-up utilized in this study. Also, it is possible that the exclusion of people over 60 years of age lowered the likelihood that participants had experienced any poor health outcomes. Future research on health disparities may make use of additional follow-up assessments to explore the long-term impact of nondisclosure on physical health and health-related quality of life.

The measure used to assess the study's main outcome variable (disclosure) was a single item that may not have fully captured participants' experiences within healthcare settings. For example, we did not assess for provider or setting factors which may be related to disclosure, nor did we assess for frequency of healthcare utilization, most recent contact with a provider, or experiences of discrimination specifically within healthcare settings. Additional limitations include using self-reported measures of health and the use of interview data gathered several years ago (in 2004–2005) in New York City. It may be the case that different social climates impact disclosure, and more recent data, or data from other localities, may evidence different patterns.

The present study findings suggest that healthcare providers may need to address experiences of minority stress, particularly internalized homophobia, as they relate to patient comfort and engagement with the healthcare environment. The findings also have implications for interventions addressing health disparities within the LGB population. The differential patterns of disclosure observed in this study suggest that interventions, such as public health messaging campaigns (Drabble et al. 2003) or cultural competency training (The Fenway Institute 2012; The Joint Commission 2011), take into account the heterogeneity of the LGB population when addressing issues of disclosure. Universal patient characteristics, such as race and education level, as well as issues unique to sexual minorities interact to influence LGB people's healthcare experiences.

Acknowledgments This research was supported by the National Institute of Mental Health grant R01-MH066058 to Ilan H. Meyer, Principal Investigator. The authors report no conflicts of interest.

References

- American Association for Public Opinion Research. (2005). *Standard definitions: Final dispositions of case codes and outcome rates for surveys*. Deerfield, IL: Author. Retrieved from http://www.aapor.org/pdfs/standarddefs_3.1.pdf.
- Barbara, A. M., Quandt, S. A., & Anderson, R. T. (2001). Experiences of lesbians in the health care environment. *Women & Health, 34*, 45–62.
- Bernstein, K. T., Liu, K., Begier, E. M., Koblin, B., Karpati, A., & Murrill, C. (2008). Same-sex attraction disclosure to health care providers among New York City men who have sex with men: Implications for HIV testing approaches. *Archives of Internal Medicine, 168*, 1458–1464.
- Boehmer, U., & Case, P. (2004). Physicians don't ask, sometimes patients tell: Disclosure of sexual orientation among women with breast carcinoma. *Cancer, 101*, 1882–1889.
- Conger, R. D., Wallace, L. E., Sun, Y., Simmons, R. L., McLoyd, V. C., & Brody, G. H. (2002). Economic pressure in African American families: a replication and extension of the family stress model. *Developmental Psychology, 38*, 179–193.
- Conron, K. J., Mimiaga, M. J., & Landers, S. J. (2010). A population-based study of sexual orientation identity and gender differences in adult health. *American Journal of Public Health, 100*, 1953–1960.
- Drabble, L., Keatley, J., & Marcelle, G. (2003). Progress and opportunities in lesbian, gay, bisexual, and transgender health communications. *Clinical Research and Regulatory Affairs, 20*, 205–227.
- Eliason, M. J., & Schope, R. (2001). Does "Don't Ask Don't Tell" apply to health care? Lesbian, gay, and bisexual people's disclosure to health care providers. *Journal of the Gay and Lesbian Medical Association, 5*, 125–134.
- Fredriksen-Goldsen, K. I., Kim, H., Barkan, S. E., Balsam, K. F., & Mincer, S. L. (2011). Disparities in health-related quality of life: a comparison of lesbians and bisexual women. *American Journal of Public Health, 100*, 2255–2261.
- Frost, D. M., & Meyer, I. H. (2012). Measuring community connectedness among diverse sexual minority populations. *Journal of Sex Research, 49*, 36–49.
- Frost, D. M., Lehavot, K., & Meyer, I. H. (2011, August). Minority stress and physical health among sexual minorities. Poster presented at the 119th Annual Convention of the American Psychological Association, Washington, DC
- Gates, G. J. (2011). *How many people are lesbian, gay, bisexual, and transgender?* Retrieved from The Williams Institute website: <http://williamsinstitute.law.ucla.edu/wp-content/uploads/Gates-How-Many-People-LGBT-Apr-2011.pdf>. Accessed 26 July 2012.
- Heck, J. E., Sell, R. L., & Gorin, S. S. (2006). Health care access among individuals involved in same-sex relationships. *American Journal of Public Health, 96*, 1111–1118.
- Herek, G. M., & Garnets, L. D. (2007). Sexual orientation and mental health. *Annual Review of Clinical Psychology, 3*, 353–375.
- Herek, G. M., & Glunt, E. K. (1995). Identity and community among gay and bisexual men in the AIDS era: Preliminary findings from the Sacramento Men's Health Study. In G. M. Herek & B. Greene (Eds.), *AIDS, identity, and community: The HIV epidemic and lesbians and gay men* (pp. 55–84). Thousand Oaks, CA: Sage.
- Institute of Medicine. (2011). *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. Washington, DC: The National Academies Press.
- King, M., Semlyen, J., See Tai, S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I. (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry, 18*, 70–87.
- Klitzman, R. L., & Greenberg, J. D. (2002). Patterns of communication between gay and lesbian patients and their health care providers. *Journal of Homosexuality, 42*, 65–75.
- Labig, C. E., Jr., & Peterson, T. O. (2006). Sexual minorities and selection of a primary care physician in a Midwestern U.S. city. *Journal of Homosexuality, 51*, 1–5.
- Lease, S. H., Horne, S. G., & Noffsinger-Frazier, N. (2005). Affirming faith experiences and psychological health for Caucasian lesbian, gay, and bisexual individuals. *Journal of Counseling Psychology, 52*, 378–388.
- Lindley, L. L., Walsemann, K. M., & Carter, J. W. (2011). The association of sexual orientation measures with young adults' health-related outcomes. *American Journal of Public Health, 102*, 1177–1185.
- Link, B. G. (1987). Understanding labeling effects in the area of mental disorders: an assessment of the effects of expectations of rejection. *American Sociological Review, 52*, 96–112.
- Martin, J. L., & Dean, L. (1987). Summary of measures: mental health effects of AIDS on at-risk homosexual men. Unpublished manuscript.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior, 36*, 38–56.
- Meyer, I. H. (2003). Prejudice, social stress and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin, 129*, 674–697.
- Meyer, I. H., Rossano, L., Ellis, J. M., & Bradford, J. (2002). A brief telephone interview to identify lesbian and bisexual women in random digit dialing sampling. *Journal of Sex Research, 39*, 139–144.
- Pachankis, J. E. (2007). The psychological implications of concealing a stigma: a cognitive-affective-behavioral model. *Psychological Bulletin, 133*, 328–345.
- Petroll, A. E., & Mosack, K. E. (2011). Physician awareness of sexual orientation and preventive health recommendations to men who have sex with men. *Sexually Transmitted Diseases, 38*, 63–67.
- Riggle, E. D. B., Rostosky, S. S., & Danner, F. (2009). LGB identity and eudaimonic well being in midlife. *Journal of Homosexuality, 56*, 786–798.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations of the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*, 1069–1081.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*, 719–727.
- St. Pierre, M. (2012). Under what conditions do lesbians disclose their sexual orientation to healthcare providers? A review of the literature. *Journal of Lesbian Studies, 16*, 199–219.
- Stein, G. L., & Bonuck, K. A. (2001). Physician-patient relationships among the lesbian and gay community. *Journal of the Gay and Lesbian Medical Association, 5*, 87–93.
- The Fenway Institute (2012). *How to gather data about sexual orientation and gender identity in clinical settings*. Retrieved from The Fenway Institute website: http://www.fenwayhealth.org/site/DocServer/Policy_Brief_HowtoGather..._v3_01.09.12.pdf?docID=9142
- The Joint Commission (2011). *Advancing effective communication, cultural competence, and patient- and family- centered care for the lesbian, gay, bisexual, and transgender (LGBT) community: a field guide*. Oak Brook, IL.
- U.S. Department of Health and Human Services, Health Resources and Services Administration. (2011). *Women's health USA 2011*. Rockville, Maryland: U.S. Department of Health and Human Services.
- van Dam, M. A., Koh, A. S., & Dibble, S. L. (2001). Lesbian disclosure to health care providers and delay of care. *Journal of the Gay and Lesbian Medical Association, 5*, 11–19.
- Ware, J. E., Kosinski, M., Turner-Bowker, D. M., & Gandek, B. (2002). Introduction. In *How to score version 2 of the SF-12 Health Survey*; pp. 3–8. Lincoln, RI, & Boston, MA: QualityMetric Inc., & Health Assessment Lab.
- Williams, D. R., Spencer, M. S., & Jackson, J. S. (1999). Race, stress, and physical health. In R. J. Contrada & R. D. Ashmore (Eds.), *Self, social identity, and physical health* (pp. 71–100). NY: Oxford University Press.