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Research Article

The Role of Contextual Factors in the Health Care Utilization of Aging LGBT Adults

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Abstract

Background and Objectives: Research suggests lesbian, gay, bisexual, and transgender (LGBT) populations have unique health care challenges. The purpose of this study was to understand contextual factors, including minority stress and social resources, associated with the health care utilization of LGBT middle-aged and older adults.

Research Design and Methods: Using data from the *Caring and Aging With Pride: National Health, Aging, and Sexuality/Gender Study* (N = 2,560), multiple logistic regression investigated associations between minority stress (i.e., internalized stigma and LGBT identity disclosure) and health care utilization (i.e., health screenings, emergency room use, routine checkups, and regular provider). We also examined the moderating effect of social resources (i.e., social network size, social support, and LGBT community belonging) in these associations.

Results: Internalized stigma was negatively associated with having a routine checkup in the previous year. LGBT identity disclosure was positively associated with having a health screening within the past 3 years. Social support moderated the association between LGBT identity disclosure and health screenings.

Discussion and Implications: Health and human service professionals and their clients should be educated about the ways that LGBT identity disclosure can affect health care utilization. Providers should consistently assess the social support of their aging LGBT clients and inform them about the potential risk of low social support in health care utilization.

Keywords: Community belonging, Internalized stigma, LGBT identity disclosure, Social network, Social support

The United States has an inequitable health care system that prohibits certain population groups from reaching their full health potential (Centers for Disease Control and Prevention, 2017). For several decades, the U.S. Department of Health and Human Services and the Institute of Medicine (IOM) have published numerous reports assessing the health care disparities of populations (e.g., racial/ethnic minorities) and the role of bias and discrimination in these disparities. Disparities in health care utilization are one aspect of health disparities considered by researchers, policymakers, and practitioners. Health care utilization can be described as the realization of health care access, such as the frequency of medical service visits (e.g., regular checkups and screenings), which

can be explained by personal reasons predicting medical service usage (e.g., fear and distrust; Anderson, 2010).

Health Care Utilization of LGBT Middle-Aged and Older Adults

Although LGBT middle-aged and older adults have been identified as a health disadvantaged population with unique health care challenges (IOM, 2011), empirical research focused on their health care utilization is limited. Available data suggest that LGBT individuals of all ages have exhibited low rates of routine checkups across several studies (e.g., Blosnich et al., 2014; Gonzalez & Henning-Smith, 2017). Age variance in routine checkup adherence has also been evidenced. For example, older LGBT participants (aged 65+) were more likely to have routine checkups than their younger LGBT counterparts (aged 50–64; Fredriksen-Goldsen et al., 2015).

Having a regular source of care from a provider who is able and willing to deliver unbiased care is also considered an important factor of health care utilization. Studies (Brennan-Ing et al., 2011; Fredriksen-Goldsen et al., 2011) have shown that the rate of having a regular source of care was moderate to high for all LGBT participants, but transgender individuals were the least likely to report having a regular physician, compared to LGB and heterosexual middle-aged and older adults. Mays et al. (2002) found that African American and Hispanic lesbians and bisexual women (age 18–64) were less likely to have a regular source of care than their heterosexual counterparts.

Conceptual Framework: Minority Stress Theory

Minority stress theory (Brooks, 1981; Meyer, 1995, 2003) asserts that LGBT individuals experience stressors related to the discrimination, prejudice, and stigma they experience for being LGBT, and these stressors can have deleterious effects on their health. Several empirical studies have attributed health disparities of aging LGBT adults to minority stress. For example, studies have found associations of internalized stigma with depression and disability (Fredriksen-Goldsen et al., 2013) and chronic physical health conditions (Hoy-Ellis & Fredriksen-Goldsen, 2016). Transgender middle-aged and older adults have reported higher rates of internalized transphobia than their LGB counterparts, which were associated with disability, poorer physical health, depressive symptomatology, and stress (Fredriksen-Goldsen et al., 2014).

Minority stress theory can also be used to explicate the effect of the unique stressors experienced by LGBT populations on the health care utilization of aging LGBT adults. For example, the oldest LGBT people came of age when homosexuality was pathologized, and some even underwent procedures such as electroshock therapy and castration, prescribed treatments meant to "cure" their sexual orientation or gender identity problem (IOM, 2011). Recollections of such callous health care practices can leave a significant imprint in the minds of LGBT people and have an influence on their health care utilization practices. Indeed, empirical evidence suggests that older bisexual and lesbian women delay seeking medical care or do not utilize health care at all, including preventative health screenings such as mammograms and Papanicolaou tests, because of their tendency to expect biased or inappropriate health care in late life (Fredriksen-Goldsen et al., 2013; Glick et al., 2018; Wallace et al., 2011).

Research also suggests that LGBT adults receive medical treatment in emergency departments at a higher rate than their heterosexual and cisgender counterparts (New York City Department of Health and Mental Hygiene, 2014). Although not tested empirically, it has been hypothesized that psychological distress related to homophobia and stigmatization often contributes to apprehension about utilizing regular or preventive care, resulting in the reliance on emergency room medical care as a last resort (Baker & Krehely, 2011; Sanchez et al., 2007).

Internalized Stigma and Disclosure in Health Care Utilization

The purpose of our study was to investigate the role of two specific minority stressors—internalized stigma and LGBT identity disclosure (subsequently referred to as disclosure) in health care utilization, by examining the association between these stressors and different health care utilization outcomes, including health screenings, emergency room use, routine checkups, and having a regular provider. According to Meyer (2003), internalized stigma is a stressor that occurs when a stigmatized individual internalizes the negative views that society places upon them. The association between internalized stigma and health care utilization among LGBT populations has been evidenced. Among lesbian women, internalized stigma was associated with less frequent gynecological visits and Pap smears (McGregor et al., 2001) and lower utilization of physical exams, clinical breast exams, Pap smears, gynecological exams, and mammography screenings (Bergeron & Senn, 2008). The influence of self-acceptance on health care utilization was also exemplified in a qualitative study of transgender adults who described the importance of due diligence in meeting their health care needs by seeking loopholes to utilize care, a process they felt was only made possible by embracing their transgender identity (Roller et al., 2015).

Disclosure is another minority stressor that may be associated with health care utilization. Meyer (2003) describes the choice of disclosure as a paradox. In one instance, an individual may choose to conceal their stigmatizing attribute to avoid potential discrimination, prejudice, or stigma. The negative consequence of disclosure was exemplified in a study (Kokogho et al., 2021) that examined disclosure of same-sex sexual practices among Nigerian men who have

sex with men and transgender women. Findings suggest that those who disclosed their same-sex practices to their family members experienced more stigma, which ultimately lead them to avoid health care. Alternatively, concealment can be stress-inducing and impede beneficial social resources available to those who disclose, such as LGBT community engagement, which can provide affirmation and encouragement that can mitigate the effect of stress on health and well-being (Meyer, 2003).

The Moderating Role of Social Resources

Minority stress theory (Meyer, 2003) also predicts that LGBT identity can be associated with opportunities to access group-level resources, such as LGBT-affiliated community services and support that foster validation and provide self-enhancing attitudes, values, and structures, which can reduce the impact of stress. Given that group-level resources can act as important effect modifiers in the minority stress process, we assessed the potential moderating effect of social resources, operationalized as social network size, social support, and LGBT community belonging, on the minority stress-health care utilization association.

Although evidence about the mitigating effect of social resources is limited, related research suggests probable associations. For example, the literature suggests that larger social networks reduce HIV-related stigma and facilitates health care utilization (Ogunbajo et al., 2018; Ramadgani et al., 2018); social support mediates the relationship between internalized homophobia and distress (McGregor, 2001). Wohl et al. (2011) found that the number of social network members that respondents disclosed their HIV status was positively associated with HIV care. Regarding sexual orientation disclosure, Jordan and Deluty (1998) showed that the more people that lesbian respondents disclosed to, the more social support they felt. There is also an indication that social support facilitates sexual orientation disclosure to health care providers (Austin, 2013; Barbara et al., 2001).

Study Hypotheses

We predicted that internalized stigma would have a negative association with health screenings, routine checkups, and having a regular provider (see Figure 1 for the conceptual model). Internalized stigma may be associated with more emergency room use due to less use of routine health care, but it may also be associated with less emergency room use, as internalized stigma may be associated with less health care utilization overall; therefore, the examination was

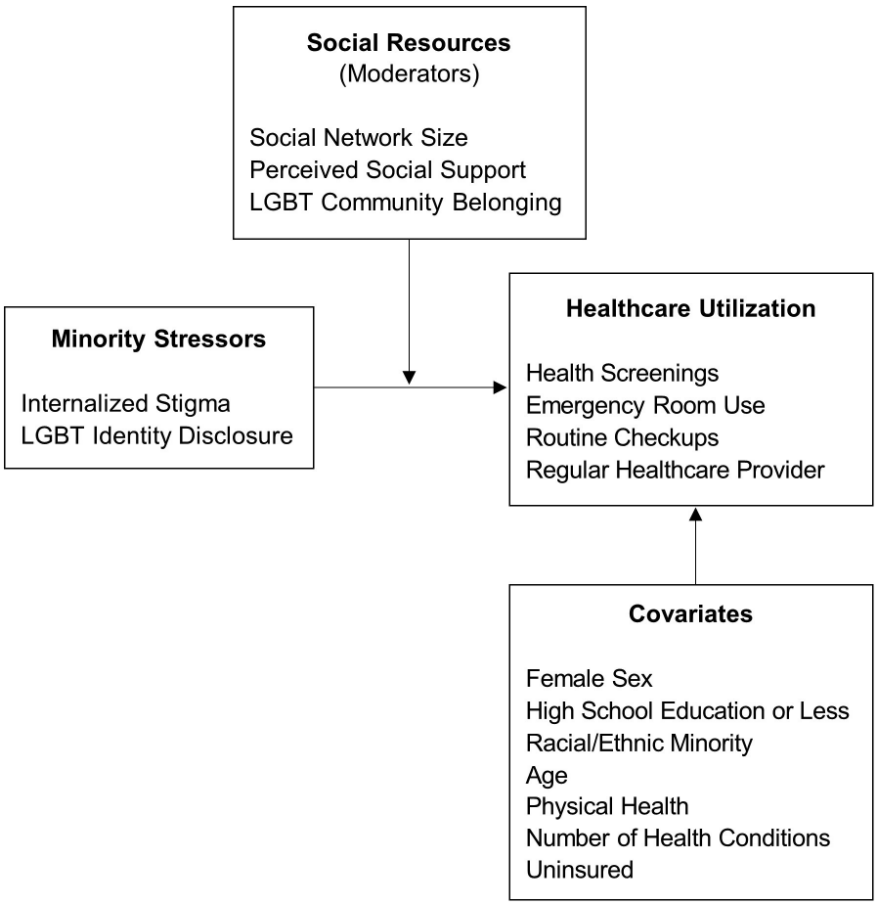

Figure 1. Conceptual model for health care utilization.

exploratory. The association between disclosure and health care utilization was also exploratory; as previously noted, disclosure could be negative or positive. We anticipated that having more social resources would weaken the negative associations of internalized stigma with health screenings, routine checkups, and having a regular provider. We did not specify the direction of the moderating effect of social resources on the associations between disclosure and health care utilization.

Research Design and Methods

Data

We analyzed data from the *Caring and Aging With Pride: National Health, Aging, Sexuality/Gender Study* (NHAS), a groundbreaking project on LGBT aging and health. Participants were recruited via the contact lists of 11 collaborating community-based aging agencies serving LGBT older adults throughout the United States. Participants provided data with a self-administered mail or online survey questionnaire (see Fredriksen-Goldsen et al., 2011 for details of the NHAS). Individuals were eligible if they were age 50 or older and self-identified as lesbian, gay, bisexual, transgender, sexual or gender diverse, or had been in a romantic relationship with someone of the same sex or gender. The survey had a response rate of 63%, which included 2,201 usable hardcopy surveys and 359 electronic surveys (a total of 2,560 surveys). The sample identified as either transgender or cisgender, of which 7% identified as transgender. Nearly 90% of the sample identified as gay or lesbian; 7% of respondents identified as bisexual, 1% as heterosexual, and 2% as other.

Measures

Health care utilization

Health care utilization was measured with four indicators: (a) having a health screening in the last 3 years, (b) emergency room use in the previous year, (c) having a routine checkup in the previous year, and (d) having a regular provider (Fredriksen-Goldsen et al., 2011, 2013).

For *health screenings*, all respondents reported how long, if ever, it had been because they had received a variety of health screenings, using four response options (within the past year, within the past 3 years, 3 or more years ago, and never). Mammogram and Pap smear screenings were only assessed for transgender and cisgender female respondents, while prostate-specific antigen screenings were only assessed for transgender and cisgender male respondents. Combining responses on all seven screening items, we created a binary indicator for health screenings (i.e., whether respondents had any health screenings in the past 3 years; 1 = yes; 0 = no). *Emergency room use* was assessed according to whether respondents had visited a hospital emergency room for their own health in the past 12 months (1 = yes; 0 = no). For *routine checkups*, respondents reported how long it had been since they last visited a physician for a routine checkup, defined as a general physical exam, not an exam for a specific injury, illness, or condition. Five response options (i.e., within past 1 year, within past 2 years, within past 5 years, 5 or more years ago, and never) were dichotomized to indicate whether the participant had a routine checkup within the past year (1 = yes; 0 = no). *Regular provider* was measured based on whether the participant had a regular provider. Three original response options (i.e., yes only one, more than one, and no) were coded as a dichotomous variable (1 = yes; 0 = no).

Minority stress

Internalized stigma was assessed with a five-item measure (Fredriksen-Goldsen et al., 2011; Herek et al., 1998), using a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree), which asked participants to rate the extent they agreed with the statements related to their sexual or gender identity. Example statements included "I wish I weren't lesbian, gay, bisexual, or transgender" and "I feel that being lesbian, gay, bisexual or transgender is a personal shortcoming for me." Mean scores were calculated across items with higher scores indicating higher levels of internalized stigma (= 0.78).

We used a modified 11-item Outness Inventory scale (Fredriksen-Goldsen et al., 2011; Mohr & Fassinger, 2000) to assess *disclosure* in their personal, social, and community relationships. Using a 4-point Likert scale (1 = definitely do not know, 2 = probably do not know, 3 = probably know, and 4 = definitely know), participants rated the degree to which the following individuals knew about their sexual orientation or gender identity: (a) mother; (b) father; (c) brothers (one or more); (d) sisters (one or more); (e) children (one or more); (f) grandchildren (one or more); (g) grandparent (one or more); (h) best friend; (i) current or more recent work supervisor; (j) neighbors (one or more); and (k) faith community. A mean score of the items was calculated with higher scores indicating higher levels of disclosure (= 0.91).

Social resources

To assess social resources, we considered three indicators: (a) social network size, (b) social support, and (c) community belonging. For *social network size*, respondents reported the number of people they interacted with in a typical month (Erosheva et al., 2015). Networks were summed to calculate the total social network size. *Social support* was assessed with the 4-item Social Support Instrument measuring perceived instrumental and emotional support (e.g., help with daily chores or a personal problem; 1 = never to 4 = always). This abbreviated scale was adapted from the Medical Outcome Survey (Sherbourne & Stewart, 1991), a 19-item social support survey that measures multiple dimensions (i.e., emotional, tangible, affectionate, and

positive social interaction) of social support (Emlet et al., 2013). Social support was calculated as a mean of the four items with higher scores indicating more social support (= 0.85). *Community belonging* was assessed by asking respondents to rate the degree to which they agreed with the following statements: "I feel good about belonging to the lesbian, gay, bisexual or transgender community" and "I'm glad I belong to the lesbian, gay, bisexual or transgender community" on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree). The measure was adapted from the Collective Self-Esteem scale (Luhtanen & Crocker, 1992; Fredriksen-Goldsen et al., 2014). Community belonging was calculated as a summarized mean of the two items with higher scores indicating more community belonging (= 0.94).

Covariates

In our models, we considered sociodemographic and health characteristics that may be associated with health care utilization as covariates, including sex, age, race/ethnicity, education, physical health, number of health conditions, and health insurance. Regarding *sex*, participants were asked to choose from the following: female, male, or other; 62.5% identified as male and 36.9% as female. Less than 1% of respondents identified as other. We used a dichotomous (0 = male; 1 = female) variable in the analyses, excluding those who identified as other from the analyses (n = 11; analytic sample N = 2,549). *Age* was calculated as a numeric value based on the respondents' reported year of birth at the time of the survey, but respondents aged 80 and over were placed into a single age category to protect confidentiality. Respondents were also asked to select their *race/ethnicity* among eight categories, but given the insufficient number of respondents in several ethnicity categories, we dichotomized race/ethnicity (0 = non-Hispanic White; 1 = racial/ethnic minority). Respondents' highest levels of *education* completed were assessed using six categories (1 = never attending school or only kindergarten, 2 = grades 1–8, 3 = grades 9–11, 4 = grade 12 or GED, 5 = college 1–3 years, and 6 = college 4+ years). Combining categories, we created a dichotomous variable for education (0 = some college or more; 1 = high school or less). *Physical health* was measured with four items from the SF-8 Health Survey (Ware et al., 2001), which measures the respondent's overall subjective assessment of their own physical health. Mean scores were calculated across the four items (ranging from 1 to 100) with higher scores indicating better physical health (= 0.88). *Number of health conditions* was measured by asking whether the participant had ever been told by a health professional that they had one or more of the conditions (total 11 conditions; e.g., diabetes, cancer, AIDS, and depression). A sum score was created with a range of 0–11. To assess *health insurance coverage*, respondents were asked to mark all applicable health insurance categories (i.e., Medicare, Medicaid, private health/medical insurance, private long-term care insurance, Veteran's Administration, Indian health service, and uninsured). The current study used whether the respondent was uninsured (0 = have health insurance; 1 = uninsured).

Analytic Strategy

Multiple logistic regression models assessed the associations between minority stress (i.e., internalized stigma and LGBT identity disclosure) and each indicator of health care utilization (i.e., health screenings, emergency room use, routine checkups, and regular health care provider) while adjusting for covariates. Model diagnostics indicated that the models were properly specified, fit the data well, and that no concerning levels of multicollinearity were detected. We first examined the minority stress indicators for the main effect models. Then, for the interaction effect models, we added social resource variables and tested the interaction terms with minority stress indicators to assess the potential moderation effects of social resources. Thus, six multiplicative interaction terms (e.g., internalized stigma × social network size, LGBT identity disclosure × social support) were included in each of the multiple logistic regression models. Nonsignificant interaction terms were trimmed until only significant interaction terms remained in the models. We used Stata Version 15 (StataCorp, 2017) for analysis.

Results

Sample characteristics are presented in Table 1; 37% of the sample identified as female, 8% of participants had a high school level education or less, and nearly 14% identified as racial/ethnic minorities. Slightly more than half of the participants were aged 65 and older (age ranged from 50 to 95 years old). Respondents reported a mean physical health score of 70 and an average of three health conditions (standard deviation [*SD*] = 2.01); 3% of the sample were uninsured.

In regard to health care utilization, more than 8% of respondents had not obtained a health screening in the last 3 years, and just under one-quarter of respondents visited the emergency room in the previous year. Over 17% reported not having a routine checkup in the past year, and over 6% did not have a regular health care provider. Minority stress was evident among participants. The mean score of the sample was 1.47 (*SD* = 0.57) for internalized stigma and 3.46 (*SD* = 0.67) for LGBT identity disclosure. In regard to social resources, respondents interacted with an average of 64 individuals (*SD* = 97.31) in their social networks monthly. On average, respondents reported 3.09 (*SD* = 0.79) for social support and 3.42 (*SD* = 0.76) for LGBT community belonging.

Main Effects Models

Table 2 presents multiple logistic regression results for the main effects of disclosure and internalized stigma on

Table 1. Descriptive Sample Characteristics

Variables	%	(*n*)	*M*	(*SD*)
Sociodemographics and health				
Female sex	37.2	(947)		
High school education or less	7.9	(201)		
Racial/ethnic minority	13.5	(343)		
Age			66.11	(8.37)
Physical health			69.69	(22.39)
Number of health conditions			2.97	(2.01)
Uninsured	2.8	(73)		
Health care utilization				
Health screenings	92.3	(2,348)		
Emergency room use	23.7	(593)		
Routine checkups	82.3	(2,077)		
Regular health care provider	93.7	(2,370)		
Minority stress				
Internalized stigma[a]			1.47	(0.57)
LGBT identity disclosure[b]			3.46	(0.67)
Social resources				
Social network size[c]			63.80	(97.31)
Social support[d]			3.09	(0.79)
LGBT community belonging[e]			3.42	(0.76)

Notes: N = 2,549. *SD* = standard deviation.
[a]Mean of five items rated 1 = strongly disagree to 4 = strongly agree.
[b]Mean of 11 items rated 1 = definitely do not know to 4 = definitely know.
[c]Number of network members that participants had interacted with in a typical month.
[d]Mean of four items rated 1 = never to 4 = always.
[e]Mean of two items rated 1 = strongly disagree to 4 = strongly agree.

four health care utilization outcomes. After adjusting for covariates, LGBT identity disclosure was associated with higher odds of getting a health screening within the past 3 years (odds ratio [OR] = 1.42, p = .001). Internalized stigma was associated with lower odds of having a routine checkup within the past year (OR = 0.80, p = .029).

Interaction Effects Models

For the potential moderating effect of social resources on the minority stress–health care utilization link, we tested potential interaction terms between minority stress and social resources (Table 2). There was a significant interaction between disclosure and social support for health screenings (OR = 1.34, p = .041), suggesting that the positive association between disclosure and the likelihood of receiving health screenings was more pronounced among respondents with higher levels of social support (OR = 1.42, p = .001) than respondents with lower levels of social support (OR = 1.24, p = .68).

Discussion and Implications

Central to fulfilling one's health potential is access to and utilization of regular, quality health care. LGBT people are disproportionately affected by health inequity in the United States (Fredriksen-Goldsen & Espinoza, 2015; Fredriksen-Goldsen et al., 2014b). Disparities in health care are particularly detrimental to the health and well-being of aging individuals who are more likely than their younger counterparts to live with several chronic conditions, geriatric syndromes, and cognitive impairments that result in a convolution of health care needs (Anderson, 2010; Lee et al., 2009). Recognizing the significance of health care for aging individuals, as well as challenges in health care among LGBT people, our study contributes a deeper understanding of contextual factors that shape the health care utilization of aging LGBT adults.

According to minority stress theory, LGBT individuals experience unique stressors related to their sexual and gender minority identity (Meyer, 1995, 2003). We focused on two types of minority stressors—internalized stigma and LGBT identity disclosure, and the role of these stressors in health care utilization. As anticipated, internalized stigma was negatively associated with having a routine checkup in the previous year. Respondents with higher levels of internalized stigma may avoid routine checkups to avoid health care challenges, such as discomfort in disclosure and discrimination on behalf of providers. This finding suggests that LGBT individuals commonly experience negative views that society places on them, which may be internalized and ultimately affect their health care utilization at least in terms of routine checkups. We did not find an association between internalized stigma and the other health care utilization outcomes, such as health screening, evidenced in previous studies (Bergeron & Senn, 2008; Fortenberry et al., 2002; McGregor et al., 2001). This discrepancy may be due to the fact that our sample included middle-aged and older respondents. It is plausible that the internalized stigma experienced by younger LGBT individuals may overshadow their need to obtain health screenings, while older LGBT individuals likely depend on health screenings given their age, and this dependence may overshadow their feelings of internalized stigma. Previous research echoes this notion. For example, Matthews et al. (2004) found that lesbian participants over the age of 50 were more likely than younger counterparts to obtain a cervical cancer screening; thus, providers may be encouraging their older patients to regularly engage in cancer screenings, more so than their younger patients.

We also found a positive association between LGBT identity disclosure and obtaining a health screening. These findings were not consistent with the previous study (Kokogho et al., 2021), which found an association between same-sex practice disclosure and health care avoidance. However, findings from this previous study may be attributed to the criminalization of same-sex sexual practices in Nigeria. When individuals disclose their

Table 2. Logistic Regression Models for Health Care Utilization

	Main effects								Interaction effects	
	Health screenings		Emergency room use		Routine checkups		Regular health care provider		Health screenings	
Variable	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Intercept	0.99	(0.74, 1.29)	0.23	(0.06, 0.84)	0.46	(0.11, 1.90)	0.47	(0.05, 4.31)	0.05	(0.00, 0.59)
Minority stress										
Internalized stigma	0.98	(0.74, 1.29)	0.94	(0.78, 1.13)	0.80*	(0.65, 0.97)	0.93	(0.68, 1.28)	2.51	(0.61, 10.27)
LGBT identity disclosure	1.40**	(1.13, 1.74)	1.07	(0.91, 1.26)	1.03	(0.86, 1.23)	1.18	(0.91, 1.53)	1.22	(0.44, 3.36)
× Social support	—	—	—	—	—	—	—	—	1.34*	(1.01, 1.77)
Social resources										
Social network size	—	—	—	—	—	—	—	—	1.01	(0.99, 1.03)
Social support	—	—	—	—	—	—	—	—	0.66	(0.20, 2.21)
LGBT community belonging	—	—	—	—	—	—	—	—	2.69	(0.72, 10.04)
Covariates										
Female sex	1.45*	(1.03, 2.06)	0.94	(0.76, 1.16)	0.68**	(0.54, 0.85)	0.93	(0.65, 1.35)	1.32	(0.89, 1.95)
High school education or less	0.40***	(0.26, 0.63)	0.85	(0.59, 1.22)	0.86	(0.57, 1.29)	0.40**	(0.24, 0.68)	0.46**	(0.27, 0.78)
Racial/ethnic minority	0.94	(0.60, 1.48)	1.22	(0.92, 1.63)	1.28	(0.91, 1.79)	0.82	(0.50, 1.33)	0.98	(0.58, 1.63)
Age	1.01	(0.99, 1.04)	1.02**	(1.01, 1.03)	1.03***	(1.01, 1.04)	1.03**	(1.01, 1.06)	1.02	(1.00, 1.04)
Physical health	1.00	(1.00, 1.01)	0.98***	(0.97, 0.98)	1.01*	(1.00, 1.01)	1.01	(1.00, 1.02)	1.00	(0.99, 1.01)
Number of health conditions	1.13**	(1.03, 1.24)	1.16***	(1.10, 1.23)	1.18***	(1.10, 1.26)	1.30***	(1.16, 1.46)	1.14*	(1.02, 1.26)
Uninsured	0.14***	(0.08, 0.25)	0.73	(0.36, 1.48)	0.15***	(0.09, 0.26)	0.08***	(0.05, 0.14)	0.15***	(0.08, 0.28)
McFadden's R^2	0.07		0.09		0.07		0.14		0.10	

Notes: N = 2,549. OR = odds ratio; CI = confidence interval.
*$p < .05$.
**$p < .01$.
***$p < .001$.

same-sex sexual practices, they put themselves at risk for violence and stigmatization, which can be in the form of physical violence, blackmail, denied health care, or fear of seeking health care. LGBT people in the United States do not face the same sociopolitical challenges as they do in Nigeria; it is less likely that LGBT people in the United States would face such dire consequences when disclosing to a family member. In fact, our study found a positive association between disclosure and health care utilization, at least in regard to aging LGBT people obtaining health screenings. These findings reflect the modern United States social context, which is more accepting of LGBT people than in previous eras, and this acceptance is beneficial to their health and well-being.

In regard to the moderating effect of social resources, results showed that having higher levels of social support and LGBT identity disclosure in tandem increased the likelihood of getting a health screening in the last 3 years. There is little evidence about the influence of social support on the association between disclosure and health care utilization. However, a study of sexual orientation disclosure and psychological adjustment of lesbian women (Jordan & Deluty, 1998) showed that the more people that respondents disclosed to, the more social support they felt. There is also an indication that social support facilitates sexual orientation disclosure to health care providers (Austin, 2013; Barbara et al., 2001). Like social support, the role of social network size and community belonging on disclosure and health care utilization has been understudied. Our study contributes to this research gap, providing evidence that social support strengthens the positive influence of disclosure on health screenings. It is plausible that individuals who are transparent about their LGBT identity with the people from whom they are receiving social support, may also feel more comfortable engaging in intimate conversations about their health and screening necessities.

Limitations and Future Directions

NHAS, the first national data set of older LGBT people, allowed us to examine associations between minority stress, social resources, and health care utilization. Based on our cross-sectional findings, it will be important to utilize NHAS longitudinal data to infer possible causal relationships among minority stress, social resources, and health care utilization variables.

Many respondents were recruited from the contact lists of community-based agencies. As such, it is likely that these service users may be overrepresented and have a stronger sense of community connectedness and social resources to begin with. Most of the collaborating agencies were located in urban areas, and therefore, findings may not be representative of rural-residing LGBT older adults. All study materials were provided in English; thus, only those proficient in English participated in the study. Due to the insufficient sample sizes in various race/ethnicity categories needed for meaningful statistical analyses, we only treated race/ethnicity as binary (non-Hispanic White vs all other respondents with a racial/ethnic minority background); therefore, our sample may not fully represent LGBT people who have a racial/ethnic minority background. Participants aged 80 and older were collapsed into a single age category to protect confidentiality. Thus, we were unable to examine the influence of age, beyond 80, on health care utilization.

Mainly self-identified lesbian, gay, and bisexual (LGB) individuals were represented in this study, potentially masking the experiences of individuals who may engage in same-sex sexual behaviors but do not explicitly self-identify as LGB. Future studies should prioritize using more inclusive measures related to sexual orientation, gender identity, and sexual behavior to better capture the lived experiences and representation of this heterogeneous population. Given that LGBT older adults are often hard to reach, we stratified the sample to ensure a demographic diversity. Therefore, it is possible that the research design and sampling procedures may influence the generalizability of the findings, for example, in regards to population estimates of middle-aged and older adults' gender. Finally, our reliance on subjective data, based on respondents' perceptions and interpretations, rather than objective measures. We accounted for several covariates previously shown to be associated with health care utilization. While beyond the scope of this article, future research might explore possible variations in health care utilization experienced by LGBT subgroups, as well as those who report their sex as something other than male or female.

Conclusions

Our study suggests that aging LGBT adults with higher levels of internalized stigma are more likely to avoid routine checkups than those with lower levels of internalized stigma. Human service providers, such as mental health professionals, can be encouraged to provide information about internalized stigma to inform their clients about the potential influence of internalized stigma on health care utilization. This information might be used by organizations that provide group therapy to aging LGBT clients for the purpose of reducing internalized stigma and promoting health care utilization. We found that respondents who disclosed their LGBT identity were more likely to obtain a health screening in the last three years and those with higher levels of social support were even more likely to obtain a health screening. Given this finding, providers could inform their aging LGBT clients on the possible benefits of disclosure, including the promotion of health screenings, a contributing factor in the health maintenance of aging adults.

Providers might also address the risks associated with low social support and regularly inquire about the social support clients are receiving, to bolster their confidence in clients obtaining regular health screenings. Finally,

providers should apply these findings by prioritizing visual representations of LGBT older adults in their practices. For example, physician's offices can incorporate signage that symbolizes LGBT inclusion, and educational pamphlets that encourage candid and safe communication for the purpose of obtaining equitable health care.

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Conflict of Interest

None declared.

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The study utilizes secondary data from the Caring and Aging With Pride: National Health, Aging, and Sexuality/Gender Study, which was available by request from the goldseninstitute.org/agingwithpride. This study was not preregistered.

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