Demographic, Regional, and Political Influences on the Sexual Health Care Experiences of Adolescent Sexual Minority Men

Michael E. Newcomb, PhD, Kevin Moran, MA, Dennis H. Li, PhD, and Brian Mustanski, PhD

Abstract

Purpose: Adolescent sexual minority men (ASMM) are affected disproportionately by HIV, and little is known about their utilization of sexual health care services. We aimed to examine demographic, regional, and political influences on the sexual health care experiences of a unique sample of racially diverse ASMM from across the United States.

Methods: Data were collected between April 2018 and February 2019 as part of the baseline survey of an ongoing pragmatic trial of a suite of HIV prevention interventions for ASMM. At the time of analysis, 699 participants had completed baseline and were included in multivariable analyses examining demographic, regional, and political differences in perceived access to and experiences of sexual health care.

Results: The majority of ASMM reported not having had various sexual health care experiences in the past 12 months (70.8%–85.7%, respectively), and a large proportion reported low-to-moderate perceived access to such services where they live (37.8%–64.1%, respectively). Some groups were significantly less likely to report perceived access to, or having had, certain sexual health care experiences, including ASMM in their early- to mid-teens and those who lived in rural areas, the South, and Republican state-level political climates.

Conclusion: These analyses indicate that ASMM underutilize sexual health care and point to specific groups with the lowest rates of engagement. To address the sexual health needs of ASMM, structural changes need to be made in the sociopolitical arena (e.g., federal nondiscrimination legislation) and medical system (e.g., mandated training in LGBTQ care) that will reduce LGBTQ-related stigma and increase access to needed care.

Keywords: adolescence, HIV/AIDS, men who have sex with men, sexual health care

Introduction

ADOLESCENT SEXUAL MINORITY men (ASMM, including gay, bisexual, and other men who have sex with men) are affected disproportionately by HIV and sexually transmitted infections (STIs) in the United States.¹ Most adolescents in the United States do not receive comprehensive sexual education in schools,² and which schools teach LGBTQ-inclusive sex education varies widely by region.³ Furthermore, parents do not consistently fill this gap in sex education for their ASMM teens,^{4–7} so many ASMM are underprepared for navigating safer sex in their early sexual experiences.

Affirming sexual health care is critical to addressing ASMM health, and regular HIV testing, prevention service utilization, and retention in care among HIV-positive individuals are key to curbing the HIV epidemic.⁸ ASMM have very low rates of HIV/STI testing,⁹ and in 2016, nearly half

of HIV-positive 13- to 24-year-old sexual minority men were unaware of their status and not engaged in care.¹ Little is known about barriers and facilitators to sexual health care among sexual minority men. Having health insurance and a regular primary care physician have been associated with a higher likelihood of receiving HIV testing¹⁰ and maintaining pre-exposure prophylaxis (PrEP)¹¹ use over time among sexual minority men. Furthermore, having a medical provider who asks about sexual orientation is associated with a higher likelihood of HIV/STI testing.^{10,12,13} Conversely, fear of stigma, heterosexist bias, and lack of LGBTQ-specific health knowledge among providers have all been linked to nondisclosure of sexual orientation to providers¹⁴ and underutilization of sexual health services.^{12,15–17} In one of the few studies of teens, ASMM noted that they would avoid seeking sexual health services out of concern that medical providers would disclose their sexual orientation to their parents.¹²

Department of Medical Social Sciences, Institute for Sexual and Gender Minority Health and Wellbeing, Feinberg School of Medicine, Northwestern University, Chicago, Illinois.

In the general population, geographic and sociodemographic characteristics contribute to variability in access to health care. The best access is concentrated in the Northeast and West, whereas the most limited access is in the South.¹⁸ Independent of region, insurance coverage and physician supply decrease with increasing rurality.^{19,20} Racial/ethnic minority individuals also receive lower quality and intensity of care, controlling for socioeconomic factors and insurance status.²¹ Mistrust in the medical system is an important deterrent to health care utilization among Black Americans,²² a phenomenon that is also associated with underutilization of HIV care and prevention services.¹⁷

It remains unknown how these patterns in health care access and utilization persist within sexual minority populations or ASMM, specifically. Attitudes toward sexual minority individuals vary across the United States, with higher stigma in those areas with less health care access (i.e., the South and Midwest)^{23,24} and rural areas.^{23,25} Geographic variations in political climate also impact the health of sexual minority individuals, including the passage of anti-LGB legislation and living in communities with fewer registered Democrats,^{26,27} so political context may impact sexual health care access and utilization among ASMM, in addition to the effects of region and rurality.

This study aimed to examine demographic, regional, and political influences on sexual health care experiences in a large diverse national sample of ASMM. Given that adolescents in general have relatively low rates of health care utilization,²⁸ we also examined perceived access to sexual health care services as an outcome. Based on prior literature,^{17–21,27} we hypothesized that older, White, and higher socioeconomic status ASMM would have more perceived access to sexual health care and higher odds of having various sexual health care experiences. We anticipated that ASMM in rural areas, the South, and states with a Republican state-level political climate (i.e., Electoral College results of the 2016 United States presidential election) would have lower perceived access to sexual health care and odds of having had various sexual health care experiences.

Methods

Data were collected between April 2018 and February 2019 as part of an ongoing pragmatic trial of eHealth HIV prevention among ASMM across the United States and three territories (Puerto Rico, Guam, and American Samoa). Eligibility criteria included: (1) aged 13–18 years; (2) assigned male at birth; (3) identified as gay, bisexual, queer, or attracted to cisgender men; (4) sexual experience (i.e., prior contact with another individual's genitals); (5) able to speak/read English or Spanish; and (6) Internet access. Participants were recruited via social media campaigns and participants from prior studies who indicated interest in future studies. Participants completed an online screener and consent form. Next, they completed four capacity to consent questions to assess the understanding of research procedures. A brief phone call or video chat with staff confirmed eligibility and consent capacity. Participants then completed a baseline survey hosted online on REDCap.²⁹ Data were collected using computer-assisted self-interview. Participants were paid \$25 for their time. All procedures were approved by the Northwestern University Institutional Review Board

with waivers of parental permission. Data for this report were taken from the baseline assessment (i.e., before intervention). At the time of analysis, 699 participants from the nonterritorial United States had completed baseline.

Independent variables

Demographic characteristics. Participants reported date of birth, categorized into three age categories: 13–14, 15–16, and 17–18 years. Participants self-reported their racial/ethnic identity, which was recoded into four categories due to limited representation of certain groups: Black, Latino/a/x, White, and other race (i.e., Asian, Native American, Native Hawaiian/Pacific Islander, and “not listed”).

Rurality, geographic region, and political climate. Participant zip codes were collected at baseline. Zip code was categorized by Rural-Urban Commuting Area Code to assess rurality.³⁰ All zip codes containing 30% or more of their workers commuting to a Census Bureau defined Urbanized Area (cities >50,000 population) were considered urban. Next, we coded zip codes into four U.S. geographic regions: Northeast, West, Midwest, and South. State of residence was also coded into “Republican” or “Democrat” based on Electoral College results of the 2016 United States presidential election. Maine provided Electoral College votes to both candidates but was coded “Republican” based on the majority of Electoral College votes.

Socioeconomic status. We assessed whether participants' families were on public assistance with the item: “Do you or anyone in your family receive any form of public assistance such as reduced price meals at school, SNAP, or welfare?” This variable was dichotomized into “yes” (coded 1) and “no”/“I don't know” (coded 0). Next, we evaluated participants' family economic stress with the 8-item Responses to Stress Questionnaire,³¹ which instructs people that, “We'd like you to tell us how often you've experienced the following in your life” (e.g., “we didn't have enough money for new clothes,” “we can't afford a nice place to live”). Response options ranged from 0 (not at all) to 3 (almost every day) and were summed. Higher scores indicate greater economic stress (Cronbach's $\alpha=0.91$).

Sexual experience and risk behavior. We created two dichotomous variables to indicate lifetime anal sex experience and condomless anal sex with male partners. Participants who reported ever having had anal sex with a male partner and/or ever having had anal sex with a male partner without a condom were coded 1, respectively.

Dependent variables

Perceived access to sexual health care. We created seven items to assess participants' perceived access to various sexual health care services, including HIV and STI testing, PrEP, HIV treatment, and therapy to discuss sexual orientation. Example items include: “How confident are you that you could get tested for HIV where you live?” and “If you were HIV positive, how confident are you that you could get treatment for HIV where you live?” The responses were: “not at all confident,” “somewhat confident,” “confident,” and “very confident.” In analyses, each item was examined separately. For

descriptive purposes in text, we considered “not at all confident” and “somewhat confident” to be low-to-moderate perceived access.

Sexual health care experiences. Nine items assessed participants’ experiences with sexual health care during the past 12 months.³² Items assessed: having a regular doctor, discussing sexual behavior and orientation with providers, discussing HIV prevention options with providers, and discussing HIV testing with providers. Response options were “yes” and “no” for all items. In analyses, each item was examined individually.

Analytic plan

Adjusted multivariable logistic regression was used to describe demographic, geographic, and political differences in sexual health care experiences. Adjusted odds ratios (ORs) with 95% confidence intervals were calculated for each independent variable. To assess perceived access to sexual health care, we employed multiple linear regression. Adjusted β -coefficients and standard errors were calculated for each independent variable.

Results

Descriptive data on study variables

Table 1 provides a summary of participant demographics. The mean age of the sample was 16.6 years ($SD=1.3$). The largest proportion identified as White (40.2%), and the largest group of ASMM was from the South (42.6%). Approximately one third of participants reported being on public assistance, almost half lived in a Republican state-level political climate, and 7.3% lived in rural areas. Tables 2 and 3 summarize descriptive data on perceived access to sexual health care and sexual health care experiences, respectively. Across all perceived access to sexual health care variables, the mean score was between “somewhat confident” and “confident.” Participants were most confident in obtaining general STI testing and were least confident in obtaining a rectal STI test. The majority reported having a regular doctor, but the vast majority reported not having had all the other assessed sexual health care experiences in the past 12 months.

Demographic, regional, and political influences on perceived access to sexual health care

Table 4 summarizes multivariable models of demographic, regional, and political influences on perceived access to sexual health care. Compared with 13–14 year olds, 17–18 year olds had significantly higher perceived access to general STI testing and rectal STI testing. Compared with White participants, Black participants had less perceived access to HIV treatment and therapy for discussing sexual orientation, Latinx participants had less perceived access to therapy, and other race participants had less perceived access to rectal STI testing, HIV treatment, and therapy. Rural participants had significantly less perceived access than urban participants to HIV treatment and therapy. Participants with more economic stress had less perceived access to HIV treatment. There were no significant differences in

TABLE 1. DEMOGRAPHIC CHARACTERISTICS OF THE ANALYTIC SAMPLE OF ADOLESCENT SEXUAL MINORITY MEN

<i>Characteristic</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>%</i>
Age, years	16.6	1.3		
13–14			89	12.7
15–16			335	47.9
17–18			275	39.3
Sexual orientation				
Gay			464	66.4
Bisexual			175	25
Queer			9	1.3
Other (i.e., unsure/questioning, heterosexual, not listed)			51	7.3
Anal sex experience				
Lifetime anal sex			410	58.6
with a male partner				
Condomless anal sex			318	45.4
with a male partner				
No prior anal sex			289	41.4
with a male partner				
Race/ethnicity				
Black			121	17.3
Latinx			221	31.6
White			281	40.2
Other (i.e., Asian, Native American, Native Hawaiian/Pacific Islander, not listed)			76	10.9
Geographic region				
Northeast			106	15.2
West			160	22.9
Midwest			135	19.3
South			298	42.6
State-level political climate				
Republican			303	43.4
Democrat			396	56.6
Rurality				
Urban			648	92.7
Rural			51	7.3
Socioeconomic status				
Public assistance			234	33.5
Not on public assistance			465	66.5
Economic stress	6.25	5.14		

SD, standard deviation.

perceived access by geographic region, Republican state-level political climate, or public assistance status.

Demographic, regional, and political influences on sexual health care experiences

Table 5 summarizes multivariable models of demographic, regional, and political influences on sexual health care experiences. Compared with 13–14 year olds, 17–18 year olds were more likely to have seen a provider for sexual health care and to have spoken to a provider about sex with male partners, condom use, condom use with male partners, and HIV testing in the past 12 months. Among ASMM who had a regular doctor, Latinx and other race participants were significantly less likely to have seen the doctor in the past 12 months. Compared with participants in the South,

TABLE 2. DESCRIPTIVE DATA ON PERCEIVED ACCESS TO SEXUAL HEALTH CARE AMONG ADOLESCENT SEXUAL MINORITY MEN

<i>How confident are you that you could...</i>	<i>Not at all confident, n (%)</i>	<i>Somewhat confident, n (%)</i>	<i>Confident, n (%)</i>	<i>Very confident, n (%)</i>	<i>Mean</i>	<i>SD</i>
...get tested for HIV where you live	71 (10.2)	216 (30.9)	194 (27.8)	218 (31.2)	2.80	1.00
...get tested for STIs where you live	74 (10.6)	190 (27.2)	211 (30.2)	224 (32)	2.84	1.00
...get PrEP where you live	143 (20.5)	267 (38.2)	158 (22.6)	131 (18.7)	2.39	1.01
...get a rectal STI test where you live	146 (20.9)	265 (37.9)	158 (22.6)	130 (18.6)	2.39	1.01
...tell a provider you want a rectal STI test/swab	219 (31.3)	229 (32.8)	143 (20.5)	108 (15.5)	2.20	1.05
...get treatment for HIV where you live	95 (13.6)	202 (28.9)	215 (30.8)	187 (26.8)	2.71	1.01
...find a therapist to talk about issues related to your sexual orientation where you live	125 (17.9)	186 (26.6)	188 (26.9)	200 (28.6)	2.66	1.08

PrEP, pre-exposure prophylaxis; STI, sexually transmitted infection.

those in the West were more likely to have seen a provider for sexual health care and to have had a provider ask about sexual orientation in the past 12 months. Participants in the Northeast were more likely than those in the South to have spoken to a provider about condoms and to have had a provider ask about sexual orientation in the past 12 months. Participants in the Midwest were more likely than those in the South to have spoken to a provider about sexual orientation, sex with male partners, and condom use with male partners in the past 12 months.

Similarly, participants in Republican state-level political climates were less likely than those in Democratic climates to have spoken to a provider about sex with male partners, condom use with male partners, and HIV testing in the past 12 months. Rural participants were less likely to have spoken to a provider about condom use in the past 12 months. With regard to socioeconomic status, among those who had a regular doctor, participants on public assistance were more likely to have seen their doctor in the past 12 months. Participants with more economic stress were less likely to have a

regular doctor, but they were more likely to have seen a provider for sexual health care and to have spoken to a provider about sexual orientation, sex with male partners, and HIV testing in the past 12 months.

Follow-up analyses

We conducted several follow-up analyses to provide further context for our findings. First, we examined whether our dependent variables (i.e., sexual health care experiences, perceived access to sexual health care) were associated with indicators of sexual experience (i.e., lifetime anal sex with a male partner and lifetime condomless anal sex with a male partner). ASMM who reported lifetime anal sex with a male partner were significantly more likely to report seeing a provider for their sexual health in the past 12 months ($OR = 2.73, p < 0.01$), speaking to a provider about their sexual orientation ($OR = 1.67, p < 0.05$), speaking to a provider about sex with male partners ($OR = 2.1, p < 0.01$), speaking to a provider about HIV testing ($OR = 2.32, p < 0.01$), and speaking to a provider about condom use with male partners ($OR = 2.0, p < 0.05$). Condomless anal sex was not associated with any of the dependent variables, except that ASMM who reported lifetime condomless anal sex were significantly less likely to have a regular doctor ($OR = 0.32, p < 0.01$).

Second, given that the referent group in our age comparison was 13–14 year olds, we re-ran analyses excluding 13–14 year olds to examine differences between 15–16 and 17–18 year olds. Compared with 15- to 16-year-old ASMM, 17–18 year olds endorsed more confidence in getting an HIV test ($\beta = 0.21, p < 0.05$), getting an STI test ($\beta = 0.23, p < 0.01$), getting a rectal STI test ($\beta = 0.19, p < 0.05$), getting PrEP ($\beta = 0.27, p < 0.01$), and telling a provider they wanted a rectal STI test ($\beta = 0.21, p < 0.05$). Furthermore, 17- to 18-year-old ASMM were more likely to report seeing a provider for their sexual health in the past 12 months ($OR = 2.27, p < 0.001$), speaking to a provider about their sexual orientation ($OR = 1.63, p < 0.05$), speaking to a provider about sex with male partners ($OR = 2.33, p < 0.001$), speaking to a provider about HIV testing ($OR = 2.59, p < 0.001$), speaking to a provider about condom use ($OR = 2.13, p < 0.001$), and speaking to a provider about condom use with male partners ($OR = 1.93, p < 0.01$).

TABLE 3. FREQUENCY OF SEXUAL HEALTH CARE EXPERIENCES AMONG ADOLESCENT SEXUAL MINORITY MEN

	<i>Yes, n (%)</i>	<i>No, n (%)</i>
Have a regular doctor	472 (67.5)	227 (32.5)
Seen regular doctor in the past 12 months	422 (89.4)	50 (10.6)
Seen a provider for sexual health	100 (14.3)	599 (85.7)
Spoken to a provider about sexual orientation	191 (27.3)	508 (72.7)
Spoken to a provider about sex with male partners	149 (21.3)	550 (78.7)
Spoken to a provider about condom use	173 (24.7)	526 (75.3)
Spoken to a provider about condom use with male partners	109 (15.6)	590 (84.4)
Spoken to a provider about HIV testing	134 (19.2)	565 (80.8)
Provider asked about sexual orientation/attractions	204 (29.2)	495 (70.8)

TABLE 4. MULTIVARIABLE MODELS EXAMINING DEMOGRAPHIC, REGIONAL, AND POLITICAL INFLUENCES ON PERCEIVED ACCESS TO SEXUAL HEALTH CARE

Study variables	HIV testing, coefficient (SE)	STI testing, coefficient (SE)	Rectal STI testing, coefficient (SE)	Ask provider for rectal STI test, coefficient (SE)	Access PrEP, coefficient (SE)	HIV treatment, coefficient (SE)	Find therapist, coefficient (SE)
Age, years (13–14 ref.)							
15–16	–0.04 (0.12)	0.02 (0.12)	0.06 (0.12)	–0.02 (0.13)	–0.04 (0.12)	0.07 (0.12)	–0.02 (0.13)
17–18	0.17 (0.12)	0.25 (0.12)*	0.25 (0.12)*	0.18 (0.13)	0.23 (0.12) [†]	0.15 (0.12)	–0.01 (0.13)
Race/ethnicity (White ref.)							
Black	–0.06 (0.11)	–0.08 (0.11)	–0.05 (0.11)	0.03 (0.12)	–0.04 (0.11)	–0.26 (0.11)*	–0.37 (0.12)**
Latinx	–0.09 (0.09)	–0.12 (0.09)	–0.12 (0.09)	0.04 (0.1)	–0.07 (0.09)	–0.15 (0.09)	–0.28 (0.1)**
Other	–0.1 (0.13)	–0.22 (0.13) [†]	–0.34 (0.13)*	–0.16 (0.14)	–0.22 (0.13)	–0.46 (0.13)***	–0.33 (0.14)*
Region (South ref.)							
West	0.06 (0.12)	0.05 (0.12)	–0.03 (0.12)	0.01 (0.13)	0.08 (0.12)	0.06 (0.12)	–0.01 (0.13)
Northeast	0.11 (0.13)	0.03 (0.13)	0.2 (0.13)	0.18 (0.13)	0.22 (0.13) [†]	0.04 (0.13)	0.07 (0.14)
Midwest	0.02 (0.11)	–0.01 (0.11)	–0.08 (0.11)	–0.01 (0.11)	–0.07 (0.11)	–0.1 (0.11)	0.09 (0.11)
Republican state	–0.07 (0.1)	–0.08 (0.1)	–0.14 (0.1)	–0.09 (0.1)	–0.08 (0.1)	–0.05 (0.1)	–0.1 (0.1)
Rural	–0.26 (0.15) [†]	–0.26 (0.15) [†]	–0.17 (0.15)	–0.03 (0.16)	–0.13 (0.15)	–0.49 (0.15)***	–0.46 (0.16)**
Public assistance	0 (0.09)	–0.03 (0.09)	–0.07 (0.09)	–0.1 (0.09)	–0.1 (0.09)	0.07 (0.09)	0.05 (0.09)
Economic stress	–0.01 (0.01)	–0.01 (0.01)	–0.01 (0.01)	0.01 (0.01)	–0.01 (0.01) [†]	–0.02 (0.01)**	–0.01 (0.01)

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, [†] $p < 0.1$.

SE, standard error.

Finally, we tested the validity of our dependent variables in measuring sexual health care experiences in two different ways. First, we examined the association between perceived access to certain sexual health care services and reports of engaging in conversations about these services with providers. Those ASMM who had spoken to a provider about HIV testing reported more perceived access to HIV testing ($t=8.69$, $p<0.001$). Similarly, having seen a provider for sexual health care was associated with more perceived access to STI testing ($t=6.27$, $p<0.001$), rectal STI testing ($t=2.44$, $p<0.05$), and PrEP ($t=2.26$, $p<0.05$). Second, we examined the associations between sexual health care experiences and having had a lifetime HIV test to assess whether having conversations with providers about sexual health is associated with actual engagement in sexual health care. Lifetime HIV testing was associated with a higher odds of having seen a provider for sexual health care in the past 12 months, as well as having spoken to a provider about sexual orientation, sex with male partners, HIV testing, condoms, and condoms with male partners (ORs = 3.37–7.97).

Discussion

The current study provides important information about perceived access to sexual health care and actual sexual health care experiences in a unique sample of ASMM from across the United States. The findings highlight important group differences that are broadly consistent with health care access disparities in the general population. The majority of ASMM reported not having had various sexual health care experiences in the past 12 months, and many lacked confidence in obtaining such services where they live. These findings point to important intervention targets for improving the sexual health care experiences of ASMM.

Although most ASMM in this sample had seen a regular doctor in the last year, few reported conversations with medical providers related to their sexual orientation, behavior, or prevention needs. Across all items assessing health care experiences, fewer than a quarter reported having had such experiences, and fewer than 15% had seen a provider for sexual health care in the last year. Given that all ASMM reported some sexual experience to be eligible for the study, the proportion that were in actual need of sexual health care services was likely substantially higher. In fact, Centers for Disease Control and Prevention recommendations include that all sexually active MSM be screened for HIV and STIs annually,^{33,34} which likely did not occur if more than 80% of ASMM did not speak to a provider about HIV testing. It is not reasonable to expect that adolescents will advocate for, or be aware of, their sexual health care needs, so it is critical that medical providers initiate conversations with adolescent patients. Indeed, the low mean rates of perceived access reported in this article point to a clear need for provider-initiated sexual health care conversations.

Older ASMM reported greater perceived access to sexual health care and a higher likelihood of sexual health care experiences, particularly with regard to obtaining more specialized sexual health care services (i.e., rectal STI testing) and having had experiences that involved talking about their sexual behavior with providers (i.e., sex with male partners, condom use, HIV testing). The significant differences we observed were between 17–18 year olds and both 15–16

TABLE 5. MULTIVARIABLE MODELS EXAMINING DEMOGRAPHIC, REGIONAL, AND POLITICAL INFLUENCES ON SEXUAL HEALTH CARE EXPERIENCES

Study variables	Has a regular doctor, aOR (95% CI)	Seen regular doctor (12 months), aOR (95% CI)	Seen for sexual health, aOR (95% CI)	Spoken about sexual orientation, aOR (95% CI)	Spoken about sex with males, aOR (95% CI)	Spoken about condoms, aOR (95% CI)	Spoken about condoms with males, aOR (95% CI)	Spoken about HIV testing, aOR (95% CI)	Provider asked about sexual orientation, aOR (95% CI)
Age, years (13–14 ref.)									
15–16	1.04 (0.62–1.72)	0.9 (0.29–2.36)	2.39 (0.92–8.2)	0.81 (0.47–1.42)	1.03 (0.54–2.09)	0.97 (0.54–1.81)	1.34 (0.63–3.21)	1.52 (0.72–3.62)	0.9 (0.53–1.57)
17–18	0.89 (0.53–1.49)	0.6 (0.19–1.57)	5.51** (2.16–18.66)	1.31 (0.77–2.31)	2.39** (1.27–4.79)	2.08* (1.17–3.87)	2.62* (1.24–6.21)	3.93*** (1.89–9.26)	1.23 (0.72–2.14)
Race/ethnicity (White ref.)									
Black	0.99 (0.61–1.62)	0.45 [†] (0.19–1.11)	1.22 (0.64–2.3)	0.7 (0.41–1.19)	0.96 (0.53–1.71)	1.49 (0.89–2.5)	1.02 (0.52–1.95)	1.58 (0.87–2.84)	1.31 (0.79–2.14)
Latinx	0.77 (0.51–1.14)	0.44* (0.2–0.98)	0.77 (0.43–1.37)	1.03 (0.68–1.57)	1.28 (0.8–2.05)	1.19 (0.76–1.87)	1.24 (0.73–2.1)	1.44 (0.87–2.39)	1.24 (0.82–1.89)
Other	0.67 (0.39–1.15)	0.33* (0.12–0.92)	1.27 (0.62–2.49)	0.69 (0.37–1.24)	0.83 (0.42–1.58)	1.43 (0.78–2.56)	1.09 (0.52–2.17)	1.43 (0.74–2.72)	1.03 (0.56–1.82)
Region (South ref.)									
West	0.97 (0.58–1.61)	0.81 (0.32–2.09)	2.00* (1.01–3.96)	1.65 [†] (0.96–2.83)	1.16 (0.63–2.1)	1.03 (0.58–1.8)	1.39 (0.71–2.71)	1.6 (0.86–2.96)	1.95* (1.15–3.3)
Northeast	1.71 [†] (0.96–3.11)	1.41 (0.5–4.48)	1.48 (0.68–3.12)	1.38 (0.77–2.46)	1.38 (0.73–2.59)	1.87* (1.06–3.3)	1.36 (0.65–2.77)	1.07 (0.53–2.12)	2.06* (1.18–3.57)
Midwest	0.97 (0.62–1.53)	1.27 (0.54–3.26)	1.53 (0.8–2.88)	1.93** (1.2–3.11)	1.96* (1.15–3.33)	1.17 (0.7–1.94)	2.02* (1.1–3.68)	1.58 (0.89–2.77)	1.54 [†] (0.95–2.49)
Republican state	0.93 (0.61–1.42)	0.91 (0.4–1.99)	0.86 (0.49–1.52)	0.74 (0.48–1.14)	0.46** (0.28–0.74)	0.73 (0.47–1.14)	0.5* (0.29–0.86)	0.6* (0.36–0.99)	0.73 (0.48–1.11)
Rural Public	0.9 (0.49–1.69)	0.42 [†] (0.16–1.24)	0.38 [†] (0.11–1)	0.68 (0.32–1.33)	0.68 (0.29–1.45)	0.4* (0.15–0.91)	0.39 [†] (0.11–1.02)	0.56 (0.22–1.26)	1.04 (0.53–1.96)
assistance	0.96 (0.66–1.4)	2.18* (1.04–4.82)	1.17 (0.70–1.95)	1.25 (0.84–1.86)	0.98 (0.63–1.52)	1.14 (0.76–1.73)	1.16 (0.71–1.88)	0.84 (0.53–1.32)	1.3 (0.88–1.91)
Economic stress	0.97* (0.93–1)	0.98 (0.92–1.05)	1.05* (1.01–1.10)	1.04* (1–1.08)	1.06** (1.02–1.1)	1.01 (0.97–1.05)	1.04 [†] (1–1.09)	1.06** (1.02–1.11)	1.01 (0.98–1.05)

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, [†] $p < 0.1$.

aOR, adjusted odds ratio; CI, confidence interval.

and 13–14 year olds (15–16 and 13–14 year olds did not differ). Adolescents become more sexually active as they move into their late teens, which makes sexual health care more relevant for 17–18 year olds. Thus, both patient- and provider-initiated sexual health conversations are more likely to occur in the late teens. Furthermore, 17–18 year olds are substantially more independent than their younger peers (e.g., less likely to live at home), so they may be better able to independently navigate sexual health care and avoid disclosure of sexual orientation to parents. However, not all teens have these freedoms, so providers should have explicit conversations with their adolescent patients about confidentiality and its limits.

Few racial differences emerged in these analyses. Racial/ethnic minority ASMM generally had less perceived access to HIV treatment and therapy for issues related to sexual orientation. Among Black participants, lower perceived access may be a result of documented medical mistrust,²² although we observed no racial/ethnic differences in the actual occurrence of sexual health care experiences in the last year. Black sexual minority men are affected disproportionately by HIV in the United States, and HIV incidence is rising among Latinx sexual minority men.³⁵ Prevention services are often targeted toward reducing these disparities, which may account for the lack of differences observed in this study despite lower rates of health care access and utilization among racial minorities overall.²¹ Regardless of the lack of differences observed, it is clear that continued efforts are required to increase access to and utilization of sexual health care services among ASMM of color to curb the high and rising incidence of HIV in these populations.

Interestingly, ASMM whose families had more economic stress had a higher likelihood of having had most sexual health care experiences in the last year. These young people may receive their medical care at free or low-cost clinics, rather than in primary care settings. Many of these clinics specialize in reproductive health care issues, including testing and treatment of HIV/STIs. Thus, providers who work at specialty clinics likely have more experience talking about sexual orientation and same-sex behavior, accounting for the differences observed in our data and highlighting the importance of providing training in LGBTQ-affirming care.

We observed several differences based on area of residence. Consistent with expectations,^{19,20} rural ASMM reported less perceived access to various types of sexual health care but were not less likely to have most sexual health care experiences. ASMM in the South, however, were less likely to have had sexual health care experiences than those in other regions. Providers and ASMM in the South may be less likely to initiate conversations about sexuality due to elevated LGBTQ-related stigma in this region.^{23,24} More work needs to be carried out to reduce stigma across the United States, so that providers and ASMM alike are more comfortable talking about sexuality. This may be achieved in part by mandating LGBTQ-affirming provider education and training for all medical professionals.

Similar to prior research documenting elevated suicidality among sexual minority youth in areas with a lower density of Democrats,²⁷ ASMM who lived in states with a Republican state-level political climate were less likely than ASMM in Democratic climates to have spoken with a provider about sex with male partners, using condoms with male partners,

and HIV testing.²³ Furthermore, the political climate differences we observed adjusted for region and rurality. ASMM who lived in more politically conservative states on average were less likely to have LGBTQ-affirming sexual health care experiences, regardless of whether they lived in a region with less stigma overall or in an urban area. Importantly, there are within-state variations in political climate, change in climate occurs across election cycles, and specific state- or jurisdiction-level policies (e.g., minor health care consent laws) may also influence health. Examination of these factors is beyond the scope of these analyses, but future work should consider these more nuanced differences. It is also interesting that most of the residence-based differences in sexual health care experiences were differences by region or political climate, whereas most of the differences in perceived access were between rural and urban locations. This indicates that stigma in certain areas may impact the likelihood of receiving sexual health care, whereas a general lack of access to care in rural areas may lead to lower perceived access.

Limitations

This research is not without limitations. First, the data are cross-sectional, so causal relationships cannot be inferred. Second, this is not a population-based sample that is representative of all ASMM in the United States. However, community-based samples that are large and diverse are valuable in that they allow for comparisons between groups that may not be possible in representative data sets. Furthermore, most population-based data sets do not administer questions unique to the experiences of sexual minority individuals, so community-based samples are critically important to understanding the unique contexts in which ASMM live. Third, ASMM in this sample were enrolled in a research trial, so they likely have experiences that differ from those ASMM who were not eligible for, or were not willing to enroll in, this trial. However, all ASMM in this sample have some sexual experience, so they are a group for which sexual health care is highly relevant. Fourth, this sample of ASMM varied in terms of their degree of sexual experience, and the need for sexual health care services varies by sexual behavior engagement. Indeed, having ever had anal sex with a male partner was associated with higher odds of having several sexual health care experiences in this sample. Future research should examine whether sexual experience varies alongside the other demographic, regional, and political differences observed in this study, which was beyond the scope of the current analyses.

Finally, we acknowledge that the large number of analyses conducted in this study increased the likelihood of type I error. If we were to use a more stringent criterion for significance (i.e., $p < 0.01$) to account for this possibility, many of the observed differences would remain significant and some would lose significance. If we were to apply this correction to analyses, it would indicate that the most robust effects for perceived access to sexual health care are the racial/ethnic, rural/urban, and socioeconomic differences in perceived access to services that require more sustained care over time (i.e., HIV treatment, therapy). With regard to sexual health care experiences, most of the age-related effects would remain significant. Furthermore, the effects of region, state-level political climate, and socioeconomic status on having

had conversations with a provider about sexual orientation or having sex with males were particularly robust.

Conclusion

The current analyses present novel data on the sexual health care experiences of ASMM. A large proportion of ASMM reported low-to-moderate perceived access to sexual health care, and the vast majority had not had sexual health care conversations with their providers. This likely leaves many vulnerable to undiagnosed or future HIV/STI infection. We also identified groups that disproportionately lack needed sexual health care, including ASMM in their early- to mid-teens and those who live in rural areas, the South, and Republican political climates. To address the sexual health needs of ASMM, structural changes need to be made in the sociopolitical arena (e.g., federal nondiscrimination legislation) and medical system (e.g., mandated training in LGBTQ care) that will reduce LGBTQ-related stigma and increase access to needed care.

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Disclaimer

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Address correspondence to:

Michael E. Newcomb, PhD

Department of Medical Social Sciences

Institute for Sexual and Gender Minority Health

and Wellbeing

Feinberg School of Medicine

Northwestern University

625 N. Michigan Avenue, 14-059

Chicago, IL 60611

E-mail: newcomb@northwestern.edu