HHS Public Access

Author manuscript

Health Behav Res. Author manuscript; available in PMC 2019 December 03.

Published in final edited form as:

Health Behav Res. 2019 ; 2(3): .

Barriers to HIV Testing Within a Sample of Spanish-speaking Latinx Gay, Bisexual, and Other Men Who Have Sex with Men: Implications for HIV Prevention and Care

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Abstract

Gay, bisexual, and other men who have sex with men (GBMSM) have higher rates of HIV infection compared to the general population in the United States, and the infection rate is growing among Latinx GBMSM, compared to a decline in most other demographic subgroups. Uptake of pre-exposure prophylaxis (PrEP), a biomedical strategy designed to reduce HIV transmission, is very low among Latinx GBMSM. HIV testing is a critical first step in the HIV prevention and care continua. We analyzed data from a community-based sample of Latinx GBMSM in the southeastern United States to identify the most common HIV testing barriers and the factors

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associated with barriers. The five most commonly reported HIV testing barriers included not knowing where to get tested, not having health insurance, fear of being HIV positive, practicing safer sex and perceiving not needing to be tested, and not being recommended to get tested. Using multivariable logistic regression modeling, speaking only Spanish, being unemployed, and adhering to traditional notions of masculinity were associated with increased barriers to HIV testing. We recommend that interventions to increase HIV testing among Latinx GBMSM be in Spanish and use culturally congruent messaging, be accessible to those who are unemployed, and incorporate positive risk-reducing aspects of masculinity.

Gay, bisexual, and other men who have sex with men (GBMSM) continue to face higher rates of HIV infection compared to the general population in the United States. GBMSM represent approximately 4% of the U.S. adult male population (Purcell et al., 2012); however, they accounted for roughly 67% of new HIV infections in the United States and over half (55%) of people with an HIV diagnosis in 2017 (Centers for Disease Control and Prevention [CDC], 2018; Rosenberg, Grey, Sanchez, & Sullivan, 2016). Among Latinx[1] populations in the United States, the District of Columbia, and six dependent areas (i.e., American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands), men accounted for 88% of new HIV diagnoses in 2017, 87% of which were attributed to male-to-male sexual contact. Between 2010–2016, new HIV diagnoses among Latinx GBMSM increased 30%, while this number decreased among most other demographic subgroups. Latinx GBMSM are infected with HIV at a rate 1.5 times greater than White GBMSM (CDC, 2018), highlighting the health disparities faced by ethnic and sexual minorities, particularly Latinx persons (Alonzo et al., 2016). If current diagnosis rates persist, one in four Latinx GBMSM may be diagnosed with HIV during his lifetime (Hess, Hu, Lansky, Mermin, & Hall, 2016).

HIV testing is a critical strategy to prevent new HIV infections and is the first step in the HIV prevention and care continua. For HIV negative persons, prevention means remaining negative. Persons who test negative for HIV can receive behavioral interventions designed to increase correct and consistent condom use, partner communication and negotiation, and uptake of pre-exposure prophylaxis (PrEP) to reduce the risk of HIV acquisition. They also can be referred to substance use treatment programs if warranted.

PrEP, approved by the U.S. Food and Drug Administration (FDA) in 2012, is a once-daily pill that has been shown to reduce the risk of HIV seroconversion by 99% when taken daily (CDC, 2014). Despite the fact that PrEP is highly effective at preventing HIV infection, PrEP utilization is lowest in the U.S. South compared to all other regions of the United States, and it is lowest among people of color regardless of region (Smith, Mendoza, Stryker, & Rose, 2016).

HIV testing is also the first step in entering the HIV care continuum for persons who test positive. Persons with HIV can be linked to care including antiretroviral therapy, prophylaxes to prevent and reduce associated complications and diseases, and psychosocial support. Earlier testing also links those identified to be HIV infected to earlier onset care,

[1]Latinx is a gender-neutral term used in lieu of Latina and Latino.

leading to a higher likelihood of achieving viral suppression and overall improved health outcomes compared to persons who are diagnosed later in the course of infection (Mugavero et al., 2012). Achieving viral suppression also decreases the risk of further viral transmission and therefore has important public health implications in reducing the spread of HIV. Most new HIV infections in the United States are transmitted from people from who do not know they have HIV or who are not receiving regular treatment (Li, Purcell, Sansom, Hayes, & Hall, 2019). Transmission via seropositive persons who are not aware of their status accounts for more than 50% of new infections (Marks, Crepaz, & Janssen, 2006). Thus, testing can profoundly contribute to reduced rates of HIV transmission.

The southeastern United States has had historically low Latinx presence but has seen rapid and substantial Latinx population increases in recent years. Southeastern states have become new Latinx settlement destinations (Painter, 2008). North Carolina is one such state and has seen its Latinx population grow by 136% from 2000 to 2014 (Stepler & Lopez, 2016). Along with experiencing shifting demographics, the Southeast has emerged as the epicenter for new HIV infections in the United States, with some of the highest HIV infection rates in the country (Painter et al., 2019; Reif et al., 2014). This combination of factors points to the need for research to better understand how to prevent HIV infection particularly vulnerable populations of Latinx GBMSM in new Latinx settlement states like North Carolina.

Because HIV testing is a critical first step of both prevention and care, we sought to identify and understand the characteristics associated with barriers to HIV testing within a community-based sample of Latinx GBMSM. By identifying specific demographic and other characteristics that are associated with barriers to testing, strategies can be developed to increase testing rates within this highly vulnerable and neglected population. Identifying and understanding the characteristics associated with HIV testing are critical to increase testing rates, improve prevention and care, and decrease the burden of HIV among Latinx GBMSM.

METHODS

Sample

We analyzed data from the baseline assessment of participants enrolled in the randomized controlled trial designed to test the *HOLA en Grupos* intervention. *HOLA en Grupos* is a behavioral intervention that our community-based participatory research (CBPR) partnership designed to increase condom use and HIV testing among Latinx GBMSM and transgender women. Details about this trial, intervention, and CBPR partnership have been reported elsewhere (Rhodes et al., 2017). Briefly, eligibility for the *HOLA en Grupos* intervention was limited to persons who identified as Latinx male or transgender, were at least 18 years old, were fluent in Spanish, reported having sex with at least one man since the age of 18, and provided written informed consent. Because the parent study was an intervention study designed to promote condom use and HIV testing, persons who had participated in any other HIV prevention intervention in the past 12 months were ineligible.

This analysis used baseline (pre-implementation) data from the parent study (*HOLA en Grupos*) and was restricted to participants who identified as cisgender men, had not been

tested for HIV in the past 12 months, reported having had sex with at least one man in the past 12 months, and had not tested positive for HIV at their most recent HIV testing. The final sample for this analysis included 118 participants.

The Wake Forest School of Medicine institutional review board approved this study and provided human participant protection oversight.

Measures

Data were collected using a Spanish-language interviewer-administered assessment that included items to assess HIV barriers, demographic characteristics, and cognitive and psychosocial constructs. The assessment was administered in private, convenient, and safe locations and took about 45 minutes to complete. All items had been validated in previous research with adult Latinx populations in the U.S. South.

Barriers to HIV testing.—To measure barriers to HIV testing, our dependent variable, we adapted our previous validated measure of Barriers to Health Care. The Barriers to Health Care measure has been used previously with Latinx men (Rhodes, Hergenrather, Zometa, Lindstrom, & Montaño, 2008). The adapted measure assesses 17 barriers to HIV testing experienced during the past 12 months (Table 1). This variable was dichotomized into participants with no or low level barriers (0–3 barriers reported) and participants with moderate or high level barriers (≥ 4 barriers). Dichotomization was based on median split.

Demographics.—Age of immigration to the United States was assessed using the item, “How old were you when you first came to live in the United States?” and was dichotomized into participants who came before the age of 18 and those who came since turning 18. We chose this dichotomization because those who immigrate before becoming 18 differ from those who immigrate to the United States after becoming 18 (J. Daniel-Ulloa et al., 2014; Gilbert, Perreira, Eng, & Rhodes, 2014). Language was assessed by the item, “In which language do you feel most comfortable communicating?” and was dichotomized into participants who reported speaking only Spanish compared to all others (those who reported speaking more Spanish than English or Spanish and English equally). Educational attainment was assessed by the item, “What is the highest level of education you reached?” and was dichotomized into participants who reported less than high school and participants who reported high school or more. Employment status was assessed by the item, “What best describes your current employment status?” and was dichotomized into participants who reported being employed year-round or had seasonal work and those who were unemployed. Participants were asked about their use of technology with the item “How often do you use Facebook?”, and responses were dichotomized into participants who reported daily or weekly use and those who reported less frequent use (e.g., monthly).

Cognitive and psychosocial constructs.—Knowledge of HIV, including symptoms, modes of transmission, and prevention strategies, was assessed by the correct answer to each of 18 true-false statements (Knipper et al., 2007). Acculturation was assessed using the 12-item Short Acculturation Scale for Latinos (Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987). The scale consisted of three domains: social network ($\alpha = 0.74$), preferred

language (α = 0.81), and media use (α = 0.84). Because these three domains were highly correlated with one another, they were merged into a single measure of acculturation (α = 0.88). Acculturation was dichotomized into participants with low levels of acculturation (1–2.99) and participants with high levels of acculturation (> 2.99). Adherence to traditional notions of masculinity was assessed using an adapted version of the Conformity to Masculine Norms Inventory (α = 0.82) (Mahalik et al., 2003). This version includes 26 items including, "I never share my feelings"; "Women should be subservient to men"; and "Work comes first". Response options include, "Strongly disagree" (1) to "Strongly agree" (4). Homo-negativity was assessed using the 26-item Revised Reactions to Homosexuality Scale (α = 0.72) (Ross & Rosser, 1996). Response options range from "Strongly disagree" (1) to "Strongly agree" (7). According to the guidelines for each measure, items were reverse coded as warranted so that higher scores signified higher levels of knowledge of HIV, greater acculturation, stricter adherence to traditional notions of masculinity, and more negative views towards homosexuality.

Translation.—The assessment was translated into Spanish using a committee approach to translation. This approach is preferred over traditional back-translation methods because it focuses on meaning and accommodates iterative feedback and correction throughout the development process. It also blends perspectives and priorities of various stakeholders (Behling & Law, 2000). A group of individuals, including translators (including native Spanish speakers from Mexico and Central America), a translation reviewer, content specialists, a questionnaire design expert, and an adjudicator with complementary skills, was convened. The translation was completed by multiple translators independently. The committee met to discuss versions of the translation; a reconciled version was created and reviewed by an adjudicator prior to final approval and use.

Data Collection

We recruited participants by distributing information about the study (e.g., posters, flyers, and brochures) at gay bars and clubs, community colleges, Latinx-owned businesses, and at community events (e.g., pride events and Latinx cultural events) through the use of mass media (i.e., newspaper and radio) and social media; and by word-of-mouth when study participants invited friends and acquaintances to participate. Among participants, 59% were recruited through word-of-mouth; 23% through social media; 10% through bar/club outreach; 5% through posted flyers; and 3% through other recruitment strategies.

Enrollment, including consent procedures, and data collection most frequently occurred in the community, such as parking lots, fast food restaurants, Latinx-owned stores, outside of parties and clubs/bars, and in- or outside participant homes, not in university or community partner offices. Each participant received $40 cash as a token of appreciation for completing the assessment.

Data Analysis

We used univariate analyses to describe frequencies, percentages, and means. We used bivariate analyses to assess associations between HIV barriers, demographic characteristics, and cognitive and psychosocial constructs. Bivariate logistic regression models were used to

estimate the association of the outcome and each correlate. All correlates that were significant at $p \leq 0.25$ in the bivariate analyses, according to model building standards (Hosmer & Lemeshow, 1989), were included in the multivariable logistic regression model. Odds ratios (OR) and 95% confidence intervals (CI) were calculated for each bivariate model, and adjusted odds ratios (AOR) and 95% confidence intervals (CI) were calculated for the multivariable model to assess the magnitude of association between barriers to HIV testing and demographic, cognitive, and psychosocial correlates. All statistical analyses were performed using SAS software version 9.4 (SAS Institute Inc, Cary, North Carolina).

RESULTS

Sample

In this analysis of Latinx GBMSM (N=118), the mean age was 29.7 years (SD= 8.64, range: 18–57). Most of the sample (70.3%) reported Mexico as their country of origin. The mean length of time living in the United States was 11.5 years (SD=6.7 years); 44% reported immigrating to the United States at age 18 and above. Language use was split almost evenly, with just under half speaking only Spanish (n=55; 46.6%) while the other half spoke either more Spanish than English or Spanish and English equally (n=63; 53.4%). About half of the participants (n=60, 50.9%) reported having obtained a high school education or above. A small percentage of participants were unemployed (n=12, 10.2%), while the majority (n=106; 89.8%) was employed either year-round or seasonally. Mean HIV knowledge, acculturation, masculinity, and reactions to homosexuality scores were 12.9 (SD = 2.14, range: 0–18), 2.02 (SD = 0.7, range: 1–4); 2.06 (SD = 0.3, range: 1.2–2.7), and 3.6 (SD = 0.8, range: 1.9–5.9) respectively (Table 2).

Frequency of HIV Testing Barriers

About a third of the participants reported moderate or high level of barriers to HIV testing (n=38; 32.2%). The most frequently cited barrier was not knowing where to get tested (n=42; 35.6%). Other highly prevalent identified barriers to HIV testing included not having health insurance (n=40; 33.9%), fear of being HIV positive (n=34; 28.8%), practicing safer sex and perceiving not needing to be tested (n=32; 27.1%), and not being recommended to get tested (n=26; 22.0%). Reported frequencies of barriers to HIV testing are presented in Table 1.

In bivariate analysis, speaking only Spanish (OR=2.3; 95% CI=1.04, 5.07; p=0.04) and being unemployed (OR=3.4; 95% CI=1.00, 11.5; p=0.05) were associated with having higher levels of barriers to HIV testing (Table 3). In multivariable analysis, three characteristics were significantly associated with having higher levels of barriers to HIV testing. Participants who reported speaking only Spanish (AOR=2.4; 95% CI=1.07, 5.8; p=0.04); being unemployed (AOR=4.8, 95% CI=1.25, 18.4; p=0.02); and adhering to more traditional notions of masculinity (AOR=1.1, 95% CI=1.00, 1.14; p=0.04) had increased odds of reporting higher levels of barriers to HIV testing (Table 3).

DISCUSSION

Given the role of HIV testing in both HIV prevention and care, an urgent need exists to understand and reduce barriers to HIV testing among at-risk populations. Nowhere is this need more critical than among Latinx GBMSM, a population in the United States that continues to have increasing rates of HIV infection and yet is less likely to be tested, less likely to be using PrEP, and less likely to be engaged in HIV care than most other populations. Increasing HIV testing within this population is critical for both HIV prevention and care.

Within our sample of Latinx GBMSM, the five most common HIV testing barriers reported were not knowing where to get tested, not having health insurance, fear of being HIV positive, practicing safer sex and perceiving not needing to be tested, and not being recommended to get tested. One third of the Latinx GBMSM in our sample reported not knowing where to get tested, and one third reported not having health insurance as barriers to HIV testing. These barriers can be overcome through increased practical knowledge of where and how to get tested. Many locations exist that provide HIV testing for free, including health departments, federally qualified health centers, free clinics, and other community organizations (such as Planned Parenthood and AIDS service organizations). Given that over 90% of participants reported daily or weekly use of Facebook, harnessing this social media platform might be a promising strategy to de-mystify HIV testing, increase knowledge of where and how to get tested, and reduce other knowledge-related barriers among Latinx GBMSM. In previous studies, our CBPR partnership has found the use of social media platforms (e.g., Adam4Adam/Radar, badoo, Craigslist, Grindr, Jack'd, and SCRUFF), to be successful in HIV prevention and care (Rhodes et al., 2018; Rhodes, McCoy, et al., 2016; Tanner et al., 2018).

While increasing Latinx GBMSM knowledge of HIV testing is important, it is critical that testing sites are prepared to provide services to this population. Unfortunately, compared to other regions of the United States, the South lacks developed infrastructures to meet the needs of non-English speakers (e.g., limited bilingual and bicultural resources) (Ortega, Rodriguez, & Vargas Bustamante, 2015; Painter, 2008; Rhodes et al., 2007; Rhodes, Mann, et al., 2015). Thus, promoting HIV testing among Latinx GBMSM may be insufficient; resource allocation and system changes may be required to ensure that bicultural and bilingual health services are available to meet this population's needs.

More than one in four participants identified being afraid of being HIV positive as a barrier to testing. Although we did not assess what participants might be afraid of if they were to be found to be seropositive, it could be that some participants were afraid of "becoming sick"; navigating the complex U.S. health care system; obtaining treatment; disclosing to loved ones such as sexual partners and family members; being subjected to gay and/or HIV-related stigma; being targeted by U.S. immigration authorities; or being "required" to leave the United States. Further research should explore these issues.

More than one in five participants noted that no one had recommended getting HIV tested. All participants were young sexually active GBMSM and fit the CDC criteria for annual

HIV testing (DiNenno et al., 2017). Interventions and programs are needed to support HIV testing among Latinx GBMSM; given the decline of HIV-related AIDS service organizations in the U.S. South because of funding challenges (Rhodes et al., 2014), these types of interventions or programs may include low burden strategies including social network interventions that rely on community leaders and tend to be scalable and sustainable (Eng, Rhodes, & Parker, 2009; Painter, Organista, Rhodes, & Sañudo, 2012; Painter et al., 2019; Rhodes, Hergenrather, Bloom, Leichliter, & Montano, 2009; Rhodes, Leichliter, Sun, & Bloom, 2016).

In multivariable analysis, three characteristics were associated with increased barriers to HIV testing among Latinx GBMSM: speaking only Spanish, being unemployed, and adhering to traditional notions of masculinity. The U.S. health care system can be particularly difficult to navigate for those who lack sufficient English-language skills. Latinx persons who speak only Spanish are less likely to seek care and more likely to experience difficulty in accessing care, be given poorer quality care when care is obtained, and have more negative health outcomes compared to those patients who speak English (Timmins, 2002). Low-literacy Spanish-language materials providing guidance on the process for HIV testing and outlining where and how to access testing services and eligibility requirements, may help address these challenges and thus increase HIV testing among Latinx GBMSM. Furthermore, because it is not surprising that young cisgender men do not visit healthcare provider often, again social network approaches that rely on trained and supportive leaders within subgroups of Latinx GBMSM may be successful, scalable, and sustainable to increase HIV testing.

Nowhere is the need to increase HIV testing among Latinx GBMSM more needed than in the U.S. South. The U.S. South is a region that historically has had little Latinx population growth but has seen unprecedented growth of this population more recently. Infrastructures have not kept pace, and bicultural and bilingual services remain difficult to find, and the U.S. South does not have the political, religious, social, ideological, economic, or cultural diversity and support that reflect other parts of the United States, particularly large urban settings (Hastings & Hoover-Thompson, 2011; Horvath, Iantaffi, Swinburne-Romine, & Bockting, 2014; Institute of Medicine, 2011; Rhodes, Mann, et al., 2015).

Employer-provided health insurance is the main source of insurance in the United States. Those who are unemployed are much less likely to have insurance, and the high cost of care may be perceived as an insurmountable barrier to accessing services, including HIV testing services. It is important to note that despite the passage of the Affordable Care Act (ACA) and the overall drop in the number of persons who are uninsured in the United States, the share of Latinx persons without coverage grew from 29% in 2013 to 40% in 2016 (Flores, 2017). Many Latinx persons live in states like North Carolina that did not expand Medicaid (Collins, Gunja, Doty, & Beutel, 2016). Furthermore, under the ACA, undocumented immigrants, who make up about 28% of the Latinx population in the United States, do not have access to coverage through health insurance exchanges. Although HIV testing is free in multiple community-based settings, without employment and employment-based insurance, Latinx GBMSM may not learn of health-related resources; they may also fear that if they are

found to be being HIV seropositive, they may not have access to medical care because they are uninsured and have limited financial resources.

The results of this analysis also indicate that having more traditional notions of masculinity (i.e., machismo) is associated with greater barriers to HIV testing. The impact machismo, which is a Latinx cultural value with predominately negative connotations, has on health is complex. On one hand, machismo is often defined as "social norms that are aggressive, sexist, chauvinistic, and hyper-masculine attitudes and behaviors" (Arciniega, Anderson, Tovar-Blank, & Tracey, 2008); thus, machismo is often viewed as negatively influencing health behaviors and promoting negative health outcomes. On the other hand, machismo is viewed less harshly as "an attitude that Latino males have toward other men, women, work, play, love, and life" (Meyer & Champion, 2010), and can positively influence health (Rhodes et al., 2009).

For Latinx GBMSM, machismo seems to have mixed implications. Latinx GBMSM with a greater levels of machismo may demonstrate their masculinity by engaging in sex at a younger age, having multiple sex partners, being the insertive partner in anal sex, and not using condoms during anal sex (Jarama, Kennamer, Poppen, Hendricks, & Bradford, 2005; Rhodes et al., 2011). However, Latinx GBMSM with greater levels of traditional notions of masculinity may have attitudes consistent with being the protector of one's family and one's health, as well as a strong sense of responsibility and working hard (Jason Daniel-Ulloa, Sun, & Rhodes, 2017).

The machismo scale that was used in this analysis focused on the negative aspects of masculinity with items emphasizing masculinity as aggressive, sexist, chauvinistic, and hyper-masculine attitudes and behaviors. After discussing the scale within our larger CBPR partnership with included Latinx men, both GBMSM and non-GBMSM, and women, we decided that the scale we used pathologized masculinity. As one partner noted, "There are many good aspects of being a man." A two-factor model that incorporates both the positive and negative traits of machismo may be more useful for measuring masculinity among Latinx GBMSM in future studies; one example of this is the Traditional Machismo and Caballerismo scale (Arciniega et al., 2008). Intervention strategies aimed at increasing HIV testing rates among Latinx GBMSM may benefit from incorporating the risk reducing characteristics of machismo, such as an emphasis on responsibility and being the protector of one's health. In this way, the positive aspects of masculinity can be harnessed to overcome barriers to HIV testing.

Implications for Health Behavior Theory

There remains need to understand and target the characteristics that influence HIV testing among Latinx GBMSM. This analysis provides an initial exploration; further research could lead to increased understandings and interpretations of HIV testing barriers and thus more effective interventions designed to increase HIV testing among this population of Latinx GBMSM. This population is particularly vulnerable to HIV infection and tends to be neglected in terms of both research and intervention.

Furthermore, masculinity as a construct requires research. Measurement of masculinity tends to focus on the negative aspects of being a man; however, strengths associated with being a man may be better measured and harnessed in intervention research with cisgender men. It also could be that constructs related to one's level of "outness" about one's sexual orientation and connectedness to the gay community may be linked to testing and thus deserve exploration in future research.

Limitations

This analysis is subject to several limitations. The data used are cross-sectional; therefore, we are unable to describe changes over time in the association between the factors we examined and HIV testing barriers. Further, study participants were not randomly selected; the sample was a convenience sample. Therefore, our findings may not be representative of these populations in other areas of the United States. Finally, all data were self-reported by participants and may be subject to social desirability and/or recall bias.

Conclusions

HIV testing is the first step in the HIV prevention and care continua. It is also the first step to identify candidates for PrEP. Despite the efficacy of PrEP at preventing new HIV infections, PrEP is underutilized. Use is lowest in the South compared to all other regions of the United States, and use is lowest among people of color regardless of region (Smith et al., 2016). To prevent new HIV infections, treat persons with HIV, and harness biomedical innovations like PrEP that could change the landscape of the HIV epidemic in the United States, we must increase HIV testing rates. In order to reach Latinx GBMSM and encourage HIV testing, efforts must be focused on understanding and reducing barriers to testing. This analysis suggests that such efforts must be bilingual and culturally congruent, made accessible to those who are unemployed, and incorporate the positive aspects of machismo and masculinity.

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Table 1.

Frequency of HIV testing barriers (N=118) among a sample of Latinx GBMSM in the U.S. South.

Barrier	n (%)
I don't know where to get tested. *No sé dónde me puedo hacer la prueba.*	42 (35.6)
I don't have health insurance. *No tengo seguro medico.*	40 (33.9)
I am afraid I might be HIV positive. *Tengo miedo ser VIH positive.*	34 (28.8)
I have been practicing safer sex. *He estado teniendo sexo seguro.*	32 (27.1)
No one recommended getting tested to me. *Nadie me recomendó hacerme la prueba.*	26 (22.0)
I don't have the time. *No tengo tiempo.*	24 (20.3)
I know my sexual partners don't have HIV. Sé que mis parejas sexuales no tienen el VIH.	24 (20.3)
I am not at risk for HIV. No estoy en riesgo de infectarme con el VIH.	21 (17.8)
I am afraid people might treat me differently. *Tengo miedo que la gente me trate de manera diferente.*	17 (14.4)
I can't take time off from work. *No puedo tomar un tiempo durante mi horario de trabajo.*	16 (13.6)
The hours aren't convenient to my work schedule. *Las horas no son convenientes debido al horario de mi trabajo.*	15 (12.7)
I don't think I am eligible to be seen to be tested. *No creo que sea elegible para que se me haga una prueba.*	13 (11.0)
I don't have transportation. *No tengo transporte.*	13 (11.0)
It is not important. *No es importante.*	11 (9.3)
I am afraid that my result will be reported to the government. *Tengo miedo que mis resultados sean reportados al gobierno.*	10 (8.5)
I can't afford it. *No puedo pagarlo.*	9 (7.6)
I am afraid people will think I'm gay. *Tengo miedo que la gente piense que soy gay.*	8 (6.8)

Table 2.

Selected demographics, cognitive and psychosocial constructs, and barriers to HIV testing among the sample of Latinx GBMSM (N=118).

Characteristic	Mean (SD) or n (%)
Age in years	29.7 (8.6)
Country of origin	
Mexico	83 (70.3%)
Other countries*	35 (29.7%)
Years in the United States	11.5 (6.7)
Age came to the United States	
≥18 years	52 (44.1%)
Language	
Spanish only	55 (46.6%)
Education level	
Less than high school	58 (49.2%)
Employment status	
Employed year-round or seasonally	106 (89.8%)
Acculturation (range 1–5)	
High (>2.99)	16 (13.6%)
Knowledge of HIV (range 0–18)	12.9 (2.1)
Adherence to traditional notions of masculinity (range 1–4)	2.06 (0.3)
Homo-negativity (range 1–7)	3.6 (0.8)
Daily or Weekly Facebook use	107 (90.7%)
Barriers to HIV testing (Moderate/High level)	38 (32.2%)

*Colombia, Costa Rica, Cuba, El Salvador, Guatemala, Honduras, Peru, Venezuela

Table 3.

Correlates of barriers to HIV testing among the sample of Latinx GBMSM: Bivariate and multivariable analyses.

Variable	Odds ratio [95% CI]	p-value	Adjusted odds ratio	p-value
Spanish-speaking only	**2.3 [1.04, 5.07]**	**0.04**	**2.4 [1.07, 5.81]**	**0.04**
From Mexico	1.3 [0.54, 3.02]	0.58		
Came to US age at ≥ 19	1.6 [0.89, 4.27]	0.09	1.4 [0.56, 3.26]	0.51
Attained ≥ high school education or more	0.8 [0.38, 1.77]	0.60		
Unemployed	**3.4 [1.00, 11.5]**	**0.05**	**4.8 [1.25, 18.4]**	**0.02**
Low acculturation	0.7 [0.20, 2.22]	0.51		
Less frequent Facebook use	0.8 [0.19, 3.09]	0.71		
Greater knowledge of HIV	1.1 [0.88, 1.30]	0.51		
Stricter adherence to traditional notions of masculinity	1.1 [0.99, 1.11]	0.10	**1.1 [1.00, 1.14]**	**0.04**
Greater homo-negativity	1.0 [0.99, 1.03]	0.31		