



Brief communication

Association of HIV pre-exposure prophylaxis awareness, preferred Spanish (vs. English) language use, and sociodemographic variables among Hispanic/Latino men who have sex with men

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Introduction

Men who have sex with men (MSM) continue to be the group at highest risk for HIV infection in the United States, and Hispanic/Latino MSM are at disproportionate risk for HIV infection compared with white MSM [1]. Furthermore, the estimated annual percentage change in the United States from 2008 to 2015 increased for Hispanic/Latino MSM, whereas it decreased for white MSM [2].

Pre-exposure prophylaxis (PrEP) is an efficacious tool for preventing the acquisition of HIV [3]. The Centers for Disease Control and Prevention clinical guidelines and recommendations for PrEP use have been available since 2014 and were updated in 2017 [4]. Yet, PrEP awareness and uptake are still lacking among Hispanic/Latino MSM [5]. A recent study of young MSM in Atlanta, Chicago,

and New York City found awareness of PrEP to be lower among Latino/Hispanic compared with whites [6].

Relatively little is known about PrEP awareness as an HIV prevention option among Latino/Hispanic MSM at risk for HIV infection [3]. Research that does exist examined barriers to information about PrEP and PrEP access. For example, a study involving black and Hispanic/Latino MSM addressed issues of PrEP stigma, challenges of discussing sex with a provider, PrEP efficacy concerns, and insurance issues among other topics; however, study findings were not reported separately for Hispanic/Latino MSM [7]. A survey administered to 159 Latino MSM in San Antonio, TX, revealed that PrEP-related expenses, stigmatization of high-risk populations, access to PrEP-informed medical providers, and mistrust of the government and providers to address health disparities among Latino MSM were common structural-level factors related to PrEP attitudes and beliefs [8].

A potential factor that has not yet been addressed in the literature, to our awareness, is language preference. Among Hispanic/Latino MSM, Spanish as the primary spoken language may hinder learning about and accessing information on PrEP. In this analysis,

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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we assessed the association of PrEP awareness and self-determined preference for Spanish instead of English language to complete a study on prevention messaging among Hispanic/Latino MSM in three U.S. cities.

Methods

Data are from the 2014 Messages4Men Study conducted in Chicago, Fort Lauderdale, and Kansas City [9]. MSM were recruited online and through community venues and eligible to participate if they were aged 18 years or older, assigned male at birth, current male gender identity, report sex with a man in the past 12 months, and live or work in one of the three city metropolitan areas. Enrolled participants completed a computer-administered survey that included sociodemographic variables including birth country, sexual orientation, self-reported HIV status, education level, age group, and PrEP awareness questions. Self-identified Hispanic/Latino men ($N = 484$) were included in this secondary analysis. Participants self-selected their preferred language for completing the survey: Spanish (20%; $n = 99$) and English (80%; $n = 385$).

Details regarding participant recruitment, eligibility, and study methods are described elsewhere [9,10]. Briefly, recruitment varied depending on local factors, including acceptability of certain forms of advertisements (newspaper vs. online), availability of venues (gay-identified clubs or community centers), and other sociocultural characteristics (gay-identified vs. nongay-identified or hidden populations). Recruitment strategies included online and printed advertisements, referrals, and venue-based outreach and occurred in English and Spanish as appropriate. Men were also referred to the study from existing HIV care and prevention services in each local community-based organization (CBO) or from partner agencies. Referrals were also facilitated through the use of palm cards or flyers and direct contact with local CBO staff. Finally, men

learned about the study when they visited the local CBO for services [10].

Variable frequencies and multivariable logistic regression analyses were conducted among a mixed HIV serostatus sample of Hispanic/Latino MSM. In this analysis, we examined associations between PrEP awareness and preferred study survey language (Spanish vs. English) and other sociodemographic variables (Model 1). We also examined sociodemographic variables associated with Spanish survey preference (Model 2).

Results

In addition to 20% of the sample responding in Spanish, 51% were aware of PrEP as an HIV prevention option (see Table 1 for other sociodemographic variables). In Model 1, Spanish (vs. English) survey preference was associated with a significantly lower odds of PrEP awareness (adjusted odds ratio [AOR], 0.55; 95% confidence interval [CI], 0.33–0.99) as were residence in Fort Lauderdale and Kansas City (vs. Chicago). HIV-positive status was associated with greater PrEP awareness (AOR, 4.97; 95% CI, 3.16–7.80). In Model 2, being born in the United States (AOR, 0.05; 95% CI, 0.02–0.13), identifying as gay versus bisexual or other identification (AOR, 0.31; 95% CI, 0.31–0.74), and higher educational attainment (AOR, 0.39; 95% CI, 0.20–0.74 some post-high school and AOR, 0.44; 95% CI, 0.24–0.82 for ≥ 4 -year college) were associated with decreased odds of Spanish as the preferred survey language.

Conclusions

Implications of these findings are that Hispanic/Latino MSM who prefer to use the Spanish language could be at a disadvantage for learning about PrEP and other emerging HIV prevention

Table 1

Prevalence and multivariable regression results for demographic variables associated with HIV pre-exposure prophylaxis (PrEP) awareness and Spanish language survey completion among Hispanic/Latino MSM

Characteristic	Overall, n/N (%)	Multivariable regression results	
		Model 1	Model 2
		Aware of PrEP (unaware, ref) AOR (95% CI)	Spanish survey (English, ref) AOR (95% CI)
Aware of PrEP	247/484 (51)	—	—
Survey language			
Spanish	99/484 (20)	0.57 (0.33–0.99)	—
English (ref)	385/484 (80)	—	—
Birth location			
The United States	203/477 (43)	1.01 (0.65–1.56)	0.05 (0.02–0.13)
Outside the United States (ref)	274/477 (57)	—	—
Sexual orientation identification			
Gay/homosexual	428/477 (90)	1.20 (0.61–2.37)	0.31 (0.13–0.74)
Bisexual/other (ref)	49/477 (10)	—	—
HIV status (self-report)			
Positive	160/469 (34)	4.97 (3.16–7.80)	0.90 (0.52–1.54)
Negative (ref)	309/469 (66)	—	—
Education level			
\leq High school diploma/GED (ref)	126/476 (27)	—	—
Some post-high school training	167/476 (35)	1.29 (0.76–2.21)	0.39 (0.20–0.74)
≥ 4 -year college degree	183/476 (38)	1.20 (0.72–2.02)	0.44 (0.24–0.82)
Age group (y)			
18–29	157/483 (33)	1.39 (0.83–2.31)	0.50 (0.25–1.01)
30–39	162/483 (33)	1.36 (0.82–2.24)	1.28 (0.70–2.33)
40+ (ref)	164/483 (34)	—	—
City/MSA			
Chicago (ref)	149/484 (31)	—	—
Fort Lauderdale	316/484 (65)	0.43 (0.27–0.68)	0.25 (0.03–2.43)
Kansas City	19/484 (4)	0.28 (0.09–0.91)	0.65 (0.36–1.16)

ref = referent group; AOR = adjusted odds ratio; GED = general education diploma; MSA = metropolitan statistical area.

Bold values represent AOR/95% CI significant at $P < .05$.

—, not included as an independent variable in model.

methods in communities throughout the United States. Written materials, community campaigns, and other PrEP educational materials for MSM are often in English language only. Although the Centers for Disease Control and Prevention offers Spanish language information and media resources regarding PrEP and other HIV prevention options [11], we are unaware of other resources developed for Spanish-speaking Hispanic/Latino MSM. Moreover, targeted and tailored PrEP educational materials are needed for Spanish-preferred Hispanic/Latino MSM in local communities, given their relatively low awareness of PrEP compared with their English-preferred peers. Innovative programmatic strategies might be developed to better reach and address the life context of all Hispanic/Latino MSM [5,6,8,12], including PrEP education through Spanish-language social media outlets and community-based venues for MSM. As demonstrated in this analysis, geographical differences may make it challenging to build PrEP awareness for Hispanic/Latino MSM as with other studies of MSM [13]. Further research is needed to determine underlying causes including HIV prevention resources and allocation, cultural context, and access to HIV care and treatment services within or across cities having geographical differences.

Prevention specialists and researchers might assess local circumstances and address their challenges to better serve Hispanic/Latino MSM, as well as other critical populations. Our findings suggest Hispanic/Latino MSM born in the United States, gay identified, and having more than a high school education may be less likely to prefer communication in Spanish, with further implications for targeted Spanish language messaging for subgroups of Hispanic/Latino MSM, including migrants and foreign born, bisexuals, and less educated populations. This is consistent with earlier research findings that foreign-born and Spanish-preferred Latino/Hispanic MSM were less likely to report safer sex [14].

There were several limitations to the present study [10]. The design was cross-sectional, and analyses were limited in that they assess PrEP awareness and not actual PrEP usage. Survey language preference (Spanish vs. English) was used as an indicator of acculturation to the U.S. English-dominant context. Preference for a Spanish-language survey does not infer that Hispanic/Latino MSM would not be able to understand prevention materials in English. Finally, participants were recruited via convenience sampling in three U.S. cities, which may not be generalizable to the Hispanic/Latino MSM population across the United States.

Regardless of correlates of Spanish language preference, Hispanic/Latino MSM in the United States who prefer using Spanish rather than English may be at a disadvantage for accessing information about PrEP and other HIV prevention tools. HIV prevention

practitioners have a key role in reducing barriers to HIV prevention information.

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