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Promoting Pre-Exposure Prophylaxis to Prevent HIV Infections Among Sexual and Gender Minority Hispanics/Latinxs

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Abstract

Sexual and gender minority Hispanics/Latinxs (henceforth: Latinxs) continue to be disproportionately impacted by HIV/AIDS in the U.S. Pre-exposure prophylaxis (PrEP) is a biomedical prevention approach which holds significant promise for at risk and vulnerable populations. We discuss barriers and facilitators to uptake of PrEP among sexual and gender minority Latinxs living in the U.S. through an ecosocial lens that takes into account structural, community, and individual contexts. The impact of immigration status on PrEP uptake emerges as a major and recurrent theme that must be understood and addressed by HIV prevention programs aiming to promote an inclusive strategy for sexual and gender minority Latinxs living in the U.S.

Keywords

HIV/AIDS; PrEP; Latino; Latinxs; Hispanic; MSM

Latinxs (a gender-neutral alternative to Latinos and Latinas) are disproportionately affected by HIV, with infection rates three times higher than among non-Hispanic whites (Rao et al., 2016). Gender and sexual minority Latinxs are at particularly high risk for infection. In the U.S., the lifetime risk of HIV infection among Latino men who have sex with men (MSM) is estimated to be 1 in 4 (compared to 1 in 11 among white MSM) (Hess, Hu, Lansky, Mermin,

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& Hall, 2016). Among all Latino men, the vast majority of HIV infections are attributed to male-to-male sexual contact, ranging from 54% among men born in Puerto Rico to 86% among men born in South America (Gray, Valverde, Tang, Siddiqi, & Hall, 2015). Between 2008 and 2013, the diagnoses of HIV infection among Latinxs living in the U.S. decreased for all populations except for MSM, in whom the number of HIV diagnoses increased by 16% (Gray et al., 2015). Despite important advances in the biomedical tools available to prevent infection, HIV rates in sexual and gender minority Latinxs continue to rise.

While research has indicated the disproportionate impact of HIV among Latino MSM, population level HIV data is scarce for transgender Latinas. Recent purposive community studies have documented high incidence and prevalence, as well as unique challenges for HIV prevention among this population, including access to comprehensive health care (Palazzolo, Yamanis, De Jesus, Maguire-Marshall, & Barker, 2016). It should be further noted that current population-based HIV data collapses all Latino men who have sex with men into a single MSM category, making it hard to understand subgroup differences between those who have sex exclusively with men and those who have sex with both men and women.

In addition, Latinx gender and sexual minorities are a diverse population that differs culturally by country of origin and time in the U.S. Limitations in surveillance data collection often precludes teasing out differences among Latinxs by country of birth, English proficiency, or legal status in the U.S. It appears, though, that among Latino MSM, recent immigrants have a lower prevalence of HIV than those in the U.S. for more than five years (Oster et al., 2013). This suggests that there is an important window of opportunity for HIV prevention during the first years following migration, which is a period of particular vulnerability (Oster et al., 2013). Latino MSM who migrate to gay epicenters often experience greater sexual freedom, but their limited English skills impede their ability to negotiate the conditions of sex placing them at risk for HIV infection (Bianchi et al., 2007). Many newly arrived sexual and gender minority Latinxs also experience poverty, discrimination, social isolation and marginalization, stigma, sexual trauma, violence, and substance abuse (Martinez et al., 2011; Martinez, Arreola et al., 2016).

Immigration status is another important factor in access to and uptake of biomedical prevention tools. Although data on the size of the undocumented sexual and minority Latinx population is limited (Martinez et al., 2011; Martinez, Arreola et al., 2016), it is estimated that there are approximately 190,000 undocumented adult LGBT Latinx immigrants in the U.S. (Gates, 2013). Because undocumented immigrants are specifically excluded from coverage under the Affordable Care Act (ACA), options for healthcare are limited for this population..

The Promise of Pre-Exposure Prophylaxis (PrEP)

Pre-exposure prophylaxis (PrEP) has been one of the most important recent biomedical advances in HIV prevention. Treatment with a combination tablet containing tenofovir and emtricitabine has been shown to be safe and effective, particularly among MSM (Grant et al., 2010; McCormack et al., 2016; Molina et al., 2015). In 2014, the U.S. Public Health

Service issued clinical practice guidelines for PrEP use among HIV-negative MSM at risk for HIV infection (Centers for Disease Control and Prevention (CDC), 2014a). Since then, health departments throughout the country have been promoting PrEP uptake among populations at risk of HIV, often through demonstration projects. While there are some notable successes in PrEP implementation, particularly among MSM of higher educational and socioeconomic status, uptake among minority communities lags behind (Dolezal et al., 2015; Hood et al., 2016; Martinez, Wu et al., 2016). Research on factors associated with differential PrEP uptake among minorities, including gender minority Latinx, is urgently needed to reduce their lifetime HIV risk (Lelutiu-Weinberger & Golub, 2016). In this paper, we consider barriers and facilitators to uptake of PrEP among sexual and gender minority Latinxs living in the U.S. through an ecosocial lens (Krieger, 1994; 2005) and their policy implications. We review selected distal and proximal factors, ranging from structural to community to individual contexts and their contribution to a syndemic in which immigration status is a major theme (Table 1).

Barriers to PrEP Uptake Among Sexual and Gender Minority Latinxs

Structural Barriers to PrEP Uptake

Lack of health insurance, ineffective patient-provider communication, low health literacy, and limited English proficiency are structural barriers to health care for immigrant populations (Beach et al., 2010; Sommers, 2013; Sudore et al., 2009). Geographic location can define the impact of these structural barriers. Sexual and gender minority Latinxs who live in regions with long-standing Latinx populations or those Latinx born in the U.S. may have better access to PrEP than foreign-born Latinxs living in emerging communities with limited culturally appropriate services (Dolwick Grieb, Desir, Flores-Miller, & Page, 2015; Martinez et al., 2011). Further, in states without Medicaid expansion, including many Southern states with large Latinx populations (e,g., Florida and Texas), health insurance coverage is limited for Latinx, and co-pays associated with PrEP are an important disincentive for uptake. A repeal or contraction of the ACA could further restrict access to PrEP.

For those Latinx who are undocumented, access to healthcare is especially limited. Foreign-born individuals are eligible for health insurance coverage under the ACA only if they are naturalized citizens or have been permanent residents for more than five years (Sommers, 2013). Temporary immigrants or those without documentation are ineligible for coverage. This makes PrEP inaccessible to many Latinxs who could benefit and may be at elevated risk as recent immigrants. In 2014, 43% of Latinxs diagnosed with HIV were not born in the U.S. or Puerto Rico, and among these individuals, 66% were MSM (Gray et al., 2015). In addition to access to healthcare, individuals without legal immigration status are not eligible for many social service programs, including housing or occupational protections, which create additional structural barriers to PrEP uptake and adherence.

Community Level Barriers to PrEP Uptake

Community awareness and engagement are also essential for PrEP uptake among Latinx sexual and gender minorities. The first step in intervention adoption is often to ensure that

those who can benefit are aware of it. Among MSM in Washington State, an increase in the percentage of high risk MSM aware of PrEP from 2012 (13%) to 2015 (86%) was matched by a significant increase in the number of individuals taking PrEP in this period, 5% to 23%, (Hood et al., 2016). In a qualitative study of Spanish-speaking MSM living in New York City, the vast majority had not heard about PrEP, but interest was high once they learned about it (Martinez, Wu et al., 2016). This is consistent with other studies in diverse settings where Latino MSM report high willingness to take PrEP, once they are aware of its benefits (Cohen et al., 2015; Lelutiu-Weinberger & Golub, 2016; Snowden, Chen, McFarland, & Raymond, 2017).

PrEP awareness varies among racial/ethnic groups, and among subpopulations of Latinxs. For example, among MSM living in Washington State there was no difference in PrEP awareness among Latinos compared to Whites, although participants had a relatively high educational attainment overall and data on country of origin or language proficiency were not reported (Hood et al., 2016). Likewise, a study of young MSM (ages 18–24) who reported going online to meet male partners, found similar PrEP awareness among Latinos compared to White and Black participants, though Latino and Black MSM were more concerned about medication side effects associated with PrEP (Bauermeister, Meanley, Pingel, Soler & Harper, 2013). However, among Latinos with limited English proficiency, awareness is considerably lower. Only 8% of MSM in Puerto Rico were aware of PrEP compared to 64% of MSM in Boston (Dolezal et al., 2015).

At the same time awareness does not always equal uptake. In a 2016 study among 100 immigrant Latino MSM aged 18–34 in Washington DC, while two thirds had heard of PrEP, only 8% of these had ever taken it (Yamanis, 2015–17). In addition, data from the 2014 National HIV Behavioral Surveillance (NHBS) study in San Francisco showed that Latino MSM at risk for HIV had the lowest PrEP uptake of any population (4.3% vs. 22.9% White, Absolute Risk Reduction (ARR) 0.2 (0.0–0.8)) (Snowden et al., 2017). Notably, insurance status was not correlated with PrEP uptake and there was no information about the population's English proficiency or country of origin. These findings support previous research that has underscored the importance of engaging community stakeholders and partners in HIV prevention efforts among Latinxs (Rhodes et al., 2013).

Individual Barriers to Pre-exposure Prophylaxis (PrEP)

At the individual level, Latino MSM report concerns about side effects, mistrust of the medical establishment, hesitancy to discuss sexual health with their physicians, and fear that people will think they have HIV if they are seen taking a pill for PrEP (Bauermeister et al., 2013; Lelutiu-Weinberger & Golub, 2016; Martinez, Wu et al., 2016). In addition, many sexual and gender minority Latinxs face stressors that must be addressed as part of comprehensive HIV care and preventive services (Martinez et al., 2011; Palazzolo et al., 2016). Latinx gender and sexual minorities commonly report feelings of discrimination, social rejection, and isolation, which lead to depression, alcohol and substance abuse. In addition, the migration experience itself can be associated with anxiety, depression, acculturation challenges, economic hardship, and discrimination (due to their immigration status as well as sexual or gender identity) (Palazzolo et al., 2016; Rhodes, Martinez et al.,

2013; Rhodes et al., 2015). For example, immigrants from Mexico and Central America typically have lived through traumatic events in their country of origin, including gang violence and sexual assault, and many continue to be targets of violence in the U.S. The individual level barriers to PrEP uptake among transgender Latinxs who have sex with men are largely unknown as they are generally underrepresented in PrEP research (Sevelius, Keatley, Calma, & Arnold, 2016).

Addressing Barriers to PrEP Uptake

Addressing Structural Barriers: Cost and Comprehensive Care

Lessons from Ryan White—One approach to facilitating access to PrEP to Latinx at risk for HIV is to create a PrEP funding mechanism similar to or through the Ryan White HIV/AIDS Program, a federally-funded safety net for uninsured or underinsured people living with HIV. The Ryan White Program is an important source of care for Latinxs living with HIV, with 113,000 Latinx patients served through this mechanism in 2014 (Bonacci & Holtgrave, 2016). The Program covers any HIV-infected individual in need, regardless of immigration status. The Program provides funding for both direct HIV clinical care and ancillary services, including navigation to social services or case management and mental health care. Mental health care and case management are critical components of the Program that provides support to participants facing multiple stressors, such as poverty and trauma, that could co-opt their efforts to remain in HIV care.

Any programmatic approach to PrEP modeled after Ryan White would also need to address the multi-level concerns individuals at risk for HIV face that can impede care. For example Latinxs living with HIV receiving care through Ryan White experience numerous unmet needs including dental and vision care, treatment for substance use disorders and transportation and housing assistance (Korhonen et al., 2016). Individuals navigating a complex health and social care system with multiple concerns also need the support of case managers who can facilitate access and adherence to PrEP. Given multiple challenges and competing priorities, PrEP programs hoping to reach vulnerable populations must provide these types of comprehensive services.

Leveraging the existing Ryan White infrastructure could further mitigate the cost of establishing a large-scale PrEP uptake program. Federal funding could be allocated through grants to states, territories, health departments, and community organizations based on demonstrated need, but with stipulations that ensured equitable access and public health promotion. Studies have consistently shown that PrEP is cost-effective in populations with highly concentrated HIV epidemics. A study comparing various strategies to curb HIV transmission among MSM living in San Francisco found PrEP to be cost effective at a cost of $27,863–$37,181 quality-adjusted life years (QALY) gained (U.S. threshold $150,000) (Drabo, Hay, Vardavas, Wagner, & Sood, 2016). These findings are consistent with a study in New York City, which found that PrEP among high risk MSM would cost $32,000/QALY (Desai et al., 2008). The cost of PrEP also compares favorably with the cost of the CDC's "Treatment as Prevention" (or Test and Treat) strategy (CDC, 2014b), which is widely adopted in the U.S. Following the implementation of the ACA, substantial reductions in the uninsured population and cost-savings to Ryan White could sustain funding for a PrEP

program (Berry et al., 2016; Hood et al., 2017). This situation may change if the ACA is repealed and replaced, and Ryan White may become a resource of last resort for an increasing number of patients.

Addressing Structural Barriers: Immigration Status

While immigration status can be a profound structural barrier for Latinx uptake of PrEP, in some instances, gender and sexual minority immigrants may be uniquely able to achieve legal status. Those who have been victims of violence in the U.S. may be eligible for U-visas, which grant legal status to victims of crimes who have suffered substantial mental or physical abuse and are willing to assist law enforcement in the investigation of criminal activity. In addition, many gender and sexual minority immigrants may qualify for asylum because of persecution in their country of origin. Obtaining legal status can be life-changing and may mitigate the risk of HIV (Palazzolo et al., 2016), but it underscores the overall importance of having service providers who are knowledgeable about immigration policies and can refer individuals for affordable legal advice. This usually requires strong partnerships with community and advocacy organizations, and, when possible, medico-legal collaborations.

Community-Driven Strategies to Address Structural Barriers to PrEP Uptake

In the absence of a federally-funded program for PrEP, some local jurisdictions and states have expanded access to PrEP for those without insurance. The annual cost of PrEP is estimated to be between $1,020 and $1,300 per patient, including medication, laboratory tests (STI/HIV screening and renal function monitoring every three months) and clinical care (Desai et al., 2008). Fortunately, uninsured patients can obtain the medication through the Gilead Patient Assistance Program (PAP) (“Gilead Truvada for PrEP,” n.d.). Clinical sites offering PrEP should be familiar with the PAP requirements and can submit requests for individual patients. Although the application form for PAP requests social security number and insurance information, patients are not excluded from eligibility if they do not have a social security number as long as they can show proof of residence in the U.S. Immigration status is not requested. To defray the cost of clinical care and laboratory tests, some state programs, such as the Washington State Pre-Exposure Prophylaxis Drug Assistance Program (PrEP DAP) (Washington State Department of Health, n.d.) and the New York State’s PrEP assistance program (PrEP AP) provide assistance for individuals at risk for HIV who are interested in PrEP (Deren, Kang, Mino, & Guarino, 2012). In addition, several local public health clinics, including those in San Diego, San Francisco and Baltimore City, and community-based organizations, such as Andromeda Transcultural Health in Washington DC, have established programs to defray the cost of PrEP by providing free or discounted sliding scale fees for clinical visits and laboratories. However, these types of programs are not available in all jurisdictions and may be particularly sparse in areas of the country with fewer resources allocated to HIV prevention efforts (Hanchette, Gibbs, Gilliam, Fogarty, & Bruhn, 2005).

Federally-qualified health centers (FQHCs) are another safety net provider for uninsured patients. These clinics receive funding from the Health Resources and Services Administration (HRSA) to provide services in areas with health provider shortages or to

serve high-risk target populations, such as homeless individuals, people who inject drugs, or immigrants. FQHCs are a safety net source of primary care for the uninsured and provide care on a sliding scale fee for people living 200% below the federal poverty line. However, delivery of PrEP at these centers is limited. In a study from South Florida, an area with a relatively high number of Latino MSM, FQHC providers expressed concerns about providing PrEP due to time constraints, financial limitations, and limited options for those without insurance or undocumented status (Doblecki-Lewis & Jones, 2016).

Addressing Community Barriers

As noted above, awareness of PrEP can also be a critical barrier to PrEP uptake. Clinics and community-based organizations (CBOs) can facilitate awareness in numerous ways. For example, CBOs that promote PrEP during HIV testing demonstrated a significant impact on PrEP awareness among minority MSM including Latino MSM (Gupta, Lounsbery, & Patel, 2017). Other research shows that racially diverse, young MSM are more likely to know “a lot about” PrEP if they had heard about it from healthcare professionals or an HIV service agency (Strauss et al., 2017). Finally, CBO program managers and line staff note that among the most valuable resources for them when implementing a biomedical intervention such as PrEP are client information and community education material and the presence of a culturally competent staff (Smith et al., 2016).

Community members and peers are also critically important to promoting awareness and acceptance of PrEP. An approach that has proved effective in disseminating health information and promoting engagement in the Latinx community has been the use of “promotores/as,” who are trusted community members trained as health workers (Ayala, Vaz, Earp, Elder, & Cherrington, 2010; Rhodes, Foley, Zometa, & Bloom, 2007). Promotores/as can act as peer navigators and build relationships with community leaders to promote PrEP awareness, and with individual patients to address particular concerns and promote PrEP initiation and retention in care. A complementary approach to increase awareness of PrEP is to leverage peer networks to promote information sharing and referral to PrEP programs beyond the reach of traditional medical settings. Racially diverse, young MSM report that they are most likely to have heard about PrEP from their friends and acquaintances (Strauss et al., 2017). Support groups, similar to those offered for HIV-infected patients, can provide important forums for patients to share their experiences taking PrEP, address challenges, and problem-solve together. These types of activities can provide valuable information for developing relevant messages that can be used in social marketing campaigns designed to increase awareness of PrEP and destigmatize its use.

Addressing Individual Barriers to PrEP Uptake

Individual level barriers to PrEP such as medical mistrust, depression and stigma may be partially addressed by patient-centered care that respects patients’ autonomy and addresses their individual needs. Clinical settings must foster an inclusive, welcoming and informative environment for Latinx. Basic steps, such as providing adequate interpretation services for patients with limited English proficiency, and ensuring that registration forms are tailored to the needs of gender and sexual minorities, and sensitive to the concerns of undocumented immigrants (e.g., providing an opt out option for social security number) can mitigate

mistrust in the medical system (Office of Minority Health, 2000; The Fenway Institute, n.d.). Provider knowledge about the specific medical needs and concerns of these populations, including an awareness of stressors such as discrimination, social rejection, isolation and the unique challenges and trauma of the migration experience, and their impact on mental health and wellbeing, is necessary to address potential barriers to PrEP uptake and adherence.

Individualized care can also be achieved through a comprehensive prevention toolkit approach (e.g., condoms, HIV-infected partner use of ART) where toolkits are modified depending on individual level of risk and include PrEP but not to the exclusion of other proven approaches. Recent studies have promoted the use of biobehavioral approaches for prevention with Latino MSM and Latino men and their same sex partners (Martinez, Wu et al., 2016). For example, among Latinx MSM, concerns about loss of pleasure, sex with a main partner, and substance use are associated with unprotected anal intercourse, highlighting the need for multiple, individualized options for HIV protection (Calabrese, Reisen, Zea, Poppen, & Bianchi, 2012; Lo, Reisen, Poppen, Bianchi, & Zea, 2011).

Conclusion

In 2007, the estimated population of Latinx MSM living in the U.S. was 1,133,237, with 204,800 (18%) living with HIV (Bonacci & Holtgrave, 2016; Lieb et al., 2011). Among those without HIV, PrEP could have a substantial impact in preventing infection. Our consideration of the barrier and facilitators to PrEP, through an ecosocial lens, shows that more can be done at a structural, community and individual level to increase awareness and uptake of PrEP among Latinx sexual and gender minorities, especially among immigrants with limited English proficiency. Our review shows that culturally-appropriate HIV prevention strategies that leverage social marketing, peer networking, health care navigators, and support groups could be adapted to include PrEP messaging (Martinez, Wu et al., 2014; Martinez, Roth, Kelle, Downs, & Rhodes, 2014; Rhodes, Daniel et al., 2013; Rhodes, Leichliter, Sun, & Bloom, 2016). At the same time, public health messaging needs to be paired with equitable access to PrEP, or it risks exacerbating mistrust of the healthcare system among minority communities. For U.S. born sexual and gender minority Latinxs, healthcare insurance under the ACA and Medicaid expansion (in selected states) provides coverage for PrEP and should be maintained to limit the spread of HIV infection.

For undocumented immigrants, PrEP coverage could be provided through an expansion of federal programming, such as the Ryan White HIV/AIDS Program. Certain jurisdictions and community-based clinics have developed local strategies to provide PrEP to all, regardless of immigration or insurance status. This approach, however, is not uniform and there are significant gaps in access to PrEP by geographic location and capacity to provide care to immigrant populations. Expanded health coverage for immigrants can be justified by positions, including supporting the right to health for all, bolstering an important part of the U.S. labor force and thus economic productivity, and protecting public health. In the case of evidence-based HIV prevention strategies such as PrEP, access for all those at risk of HIV infection, regardless of ability to pay or immigration status will be critical to reducing new HIV infections in the U.S. as recommended by the 2015 National HIV/AIDS Strategy.

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Table 1

Barriers and Facilitators to access and uptake of PrEP among sexual and gender minority Latinxs living in the U.S.

Level	Barriers	Facilitators
Structural	• Lack of health insurance • Ineffective patient-provider communication • Low health literacy • Limited English proficiency • Setting • Undocumented • Economic hardship • Housing • Lack of occupational protections	• Free or low-cost care- the Ryan White model (including mental health care) • Gilead Patient Assistance Program • FQHC • Dental and vision care, substance use disorder care, housing, transportation and employment assistance. • Medical interpreters • Peer navigation • U-visas for victims of crime • Asylum for persecuted gender minorities • Medico-legal collaborations
Community	Low awareness of PrEP	• Leveraging clinics that are providing HIV testing. • Client information material • Community educational material • Culturally competent staff • Peer navigators (promotores/as) • Peer networks • Support groups • Social marketing
Individual	• Concerns about side effects • Hesitancy to discuss sexual health with provider • Medical mistrust • HIV stigma • Discrimination, social rejection, isolation • Depression, anxiety, alcohol and substance abuse • Acculturation challenges • Trauma (gang violence) Note: unique barriers for transgender Latinx are largely unknown.	• Culturally sensitive care that addresses specific medical needs and concerns of Latinx, LGBT and recent immigrant populations, and their impact on mental health and wellbeing • Registration forms that address needs of gender and sexual minorities and concerns of undocumented immigrants.