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## Annual Review of Public Health The Health of Undocumented Latinx Immigrants: What We Know and Future Directions

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#### Abstract

Undocumented Latinx immigrants experience unique factors prior to migration, during migration, and after migration that shape their health. Our review summarizes the limited but growing literature highlighting how exposure to trauma, immigration enforcement, changes to social networks, and discrimination negatively affect the mental and physical health of undocumented Latinx immigrants. We also discuss how policies and social ties can promote their health. We focus on areas of particular concern, including health care, mental health, and HIV. Future research should use interdisciplinary approaches and intersectional frameworks to understand and address health inequities. Conducting research with undocumented Latinx immigrant communities requires community engagement, assurance of confidentiality, and creative recruitment and retention strategies. Recommendations for public health practice include investing in community health centers and organizations to ensure access to health and social services; presenting results with sufficient contextualization to interpret their generalizability; and advocating for federal-, state-, and local-level policy changes that reduce the negative health consequences associated with being undocumented.

#### INTRODUCTION

The Latinx population is the largest and fastest-growing racial/ethnic minority group in the United States, and until recently much of this growth was due to immigration (39) (see the sidebar titled Latinx). A large percentage of the Latinx population in the United States are immigrants (34%), many of whom are undocumented because they do not have legal authorization to live or work in the United States (96). Undocumented immigrants include those who either enter without permission from the US government or enter with a legal visa that is no longer valid. The legal status of immigrants has important implications for their health because it determines their rights to enter and reside in the country, as well as their access to employment, education, and public benefits.

An estimated 11.3 million undocumented immigrants currently live in the United States, accounting for nearly one-quarter (24%) of the US foreign-born population (22, 96). Most of the undocumented immigrant population is from Mexico and countries in Central America (El Salvador, Guatemala, Nicaragua, and Honduras) (21); their race and ethnicity reflect their countries of origin: 74% are Hispanic or Latinx, 12% are Asian, 7% are white, and 5% are black (96). Many undocumented immigrants have settled in destinations such as California, Texas, Florida, New York, and Illinois, which have historically been receiving states for large populations of Latinx immigrants. However, states in the Midwest and Southeast have also seen dramatic growth in the Latinx immigrant population (95). Most undocumented immigrants are now long-term residents (66%), having lived in the United States 10 years or more with no plans to return to their countries of origin (96). While immigration to the United States has slowed in recent years, the undocumented population may continue to grow if programs such as Temporary Protected Status (TPS) and Deferred Action for Childhood Arrivals (DACA) are ended (99).

Undocumented immigrants have been arriving and settling in the United States for decades, but until recently there has been little research on the impact of their legal status on health (25). In this review, we summarize what is known about the health status of undocumented Latinx immigrants. We focus specifically on Latinx immigrants because they are the largest US racial/ethnic minority group and because the past decade has been historically marked by policies or proposals aimed at deterring immigration and restricting their rights (99). We begin by describing the social and political factors shaping the health of undocumented immigrants at each stage of migration. We then focus on three health conditions most impacted by legal status: access to health care, mental health, and human immunodeficiency viruses (HIV). We close with recommendations for future research and public health practice.

#### STAGES OF MIGRATION AND THEIR IMPACT ON HEALTH

Researchers have used the stages of migration framework to highlight determinants of health prior to migration, during migration, and after migration. While this framework explains the impact of

#### LATINX

The term Latino, the masculine form of this term in Spanish, has been critiqued for reinforcing male privilege and patriarchy. Researchers have used several variations in an attempt to be gender neutral and recognize the unique experiences of Latinas. More recently, the term Latinx (pronounced la-TEE-neks) has been used to express gender neutrality and include transgender and non-gender-binary Latinos and Latinas. We use the term Latinx to refer to all genders and in recognition of this history.

migration on health for all immigrants, in this section we highlight how these stages uniquely impact undocumented Latinx immigrants.

#### Conditions in Countries of Origin: The Impact of Premigration Economic Stress, Political Instability, and Violence

Voluntary migration is often driven by the lack of economic and educational opportunities or the desire to reunify with family who already live in the United States. Other immigrants leave their countries to escape political instability, persecution, war, or violence. Those experiencing these difficult conditions may be even more likely to emigrate without documentation because they cannot wait to be granted entry through asylum or other mechanisms. Immigrants from Mexico describe both extended periods of poverty and community violence as common reasons for emigrating (11). Countries such as El Salvador, Guatemala, Honduras, and Nicaragua have experienced extended periods of political instability, including civil wars and political violence, inciting their citizens' emigration (36, 117). While a robust literature has linked adverse economic and political conditions to chronic stress and negative health outcomes, few studies have assessed the impact of premigration living conditions on health for undocumented Latinx immigrants (37, 44).

The limited research that has been done suggests that premigration factors are most directly linked to poor mental health outcomes. Experiencing extreme poverty, political or gang violence, natural disasters, or other traumatic events has been associated with long-term mental health consequences (40, 89). For example, in a study of Latinx immigrant parents living in North Carolina (including many without documentation), those who had experienced poverty or a major life event prior to migration were more likely to report symptoms of depression (89). A similar study found that experiencing trauma prior to migration was associated with a higher risk of experiencing symptoms of post-traumatic stress (98). Latinx immigrants who have been exposed to trauma, such as political violence, are also less likely to leave the United States to return to their countries of origin (40).

#### The Migration Journey: Continued Exposure to Hazardous Conditions

Undocumented immigrants arrive in the United States in different ways. Some enter with a visa for a short-term visit as a tourist or student and then overstay their visa. Others arrive at established ports of entry seeking asylum but are often detained for long periods of time as they wait for their claims to be processed. Others without legal permission to enter may choose to cross the United States-Mexico border outside of established ports of entry. For those who enter without legal permission, their migration journey can be dangerous for several reasons. Several policies began in the mid-1990s to prevent immigration through deterrence, intentionally redirecting migrants to more dangerous remote areas (55). As enforcement along the United States-Mexico border has increased, many immigrants cross in more dangerous places to avoid detection by US Immigration and Customs Enforcement (ICE) (116). These efforts can include traveling through remote deserts, over mountainous terrain, or across hazardous rivers. Therefore, their migration can be grueling physically, including long walks in high temperatures and limited access to food and water. Several studies have documented the risk of dehydration, heat stroke, injury, violence, and death among those crossing the border (18, 31, 58). Researchers have concluded that increased enforcement along the United States-Mexico border is partly responsible for the increase in border-crossing deaths (8, 114).

Exposure to physical, verbal, psychological, and/or sexual violence is also widespread among undocumented immigrants crossing the border (112, 116). Many immigrants must pay large sums

of money to hire guides and then also risk mistreatment by these guides who can easily exploit them (117). Examples of common traumatic events include human or drug trafficking, extortion, witnessing violence, and abandonment by crossing guides. These traumatic events can have a serious and lasting impact on the mental health of immigrants and their family members (98, 113). Women are particularly vulnerable to trauma during border crossing, including the risk of physical or sexual assault or both (18).

With the heightened surveillance along the border comes increased risk for being detained by immigration officials. Immigration detention is the fastest-growing form of incarceration in the United States, and immigrants are the fastest-growing population in federal prisons (65). In 2018, ICE detained nearly 400,000 people and removed more than 250,000 people (129). Advocacy organizations have documented human rights abuses toward those in detention, including physical and verbal abuse, lack of medical care, lack of access to legal counsel, the separation of parents and children, and inhumane conditions (76). Women, including transgender women, have experienced inadequate health care, limited or no access to a phone, and verbal or physical assault (20, 139).

#### Life After Migration: The Impact of Political and Social Factors on Health

Once undocumented Latinx immigrants are settled in the United States, a number of political and social factors can impact their mental and physical health. In this section, we focus on the factors that uniquely impact undocumented Latinx immigrants, including immigration policies, changes to social networks, and experiences of discrimination. We describe how these determinants can have either health-harming or health-promoting effects on undocumented Latinx individuals. It is important to note, however, that they experience many of the same challenges that all immigrants face after migration, including difficulties adjusting to life in the United States, navigating new systems, and facing language barriers and limited access to employment and educational opportunities, all of which also impact health (1, 25).

**Immigration policies.** Laws and policies across different levels (federal, state, local) can directly and indirectly impact the health of undocumented immigrants (60). These policies include administrative rules that limit immigrants' access to education, health insurance, food assistance, and economic opportunities (99). At the federal level, there have been record-level deportations, compared with the early 2000s (4), and increased funding for the enforcement of federal immigration laws (131). At the state level, from 2005 to 2012, there has been a rise in the passage of anti-immigrant legislation (79, 141). State omnibus immigration laws such as S.B. 1070 in Arizona allow law enforcement to request documentation of immigration status during any lawful stop (10); five other states (Utah, Indiana, Alabama, Georgia, South Carolina) have laws similar to Arizona (94). More restrictive legislation in Alabama has required schools to verify students' immigration status (see 78). At the local level, substantial funding has gone toward programs that permit designated officers to perform immigration law enforcement functions and, in some jurisdictions, to jail immigrants without warrants (4, 81). These programs include 287(g), the section of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, which authorizes partnerships between ICE and state/local law enforcement agencies so that designated state/local law enforcement officers can identify and remove undocumented immigrants (128). Secure Communities is another program, which authorizes sending the fingerprints of any person in law enforcement custody to immigration officials so that they may be checked against their databases; this program was temporarily suspended in 2014 and reinstated in 2017 under Executive Order (127).

Laws and policies that restrict immigrants' rights can have negative effects on Latinx communities, including an increased likelihood of Latinx US-born children living without a parent (4), increased household poverty (5), lower educational attainment for children (6), and lower civic engagement. At the individual level, restrictive immigration policies result in heightened fear, restricted mobility, distrust of authority, and increased stress (9, 51). These effects are experienced by undocumented individuals as well as their friends, children, and extended families (123).

Researchers have increasingly highlighted the negative impact of restrictive immigration policies on health (30, 99). Most previous studies have used large data sets to examine the effects of state- or local-level policies on the Latinx population. For example, one study using nonpublic, restricted data from the National Health Interview Survey, including location of residence and information on immigrants' year of entry into the United States, found that the Secure Communities program increased the proportion of Latinx immigrants with mental health distress and decreased their self-rated health (135). Studies in Alabama, Arizona, and California have documented the negative effects of restrictive laws on the use of prenatal care (121); the use of public assistance and preventive health care by adolescent mothers (124); and the use of local public health services (136), including testing for sexually transmitted infections as well as family planning.

Other studies have described specific effects of these policies on undocumented immigrants. Undocumented immigrants living in environments where they fear deportation owing to restrictive policies are less likely to access health services (7, 48, 107), are less able to comply with health providers' recommendations (49), and experience higher levels of depressive symptoms and anxiety than do their documented counterparts (14, 50, 68, 73). Increased police and immigration surveillance also result in decreased mobility for undocumented immigrants, disrupting their ability to seek employment, maintain social relationships, and access public services and spaces (123). Immigration enforcement also results in fear of and anxiety around deportation. This chronic anticipatory stressor can lead to social isolation, limited access to health and social services, and economic uncertainty (42).

Natural experiments, using quasi-experimental study designs, have captured the health effects of changes in immigration policies or events such as immigration raids. For example, one study examined birth certificates of children born before and after a large federal immigration raid at a meat-processing plant in Potsville, Iowa, in 2008 (82). The researchers found that infants born to Latina mothers after the raids were 24% more likely to be underweight than infants born to Latina mothers the previous year. This association persisted after adjusting for the mother's country of origin and other maternal risk factors. In another quasi-experimental study, midway through a 2013 health survey among Latinx residents in Michigan, federal immigration authorities and the local sheriff's department raided a warehouse (67), arresting and ultimately deporting several Latinx residents. Those who completed the survey after the raid reported higher levels of immigration-related stress and lower self-rated health.

On the other hand, policies have the potential to mitigate stressors for immigrants and promote health. Such policies include sanctuary city protections (e.g., local law enforcement who do not cooperate with ICE), opportunities to obtain a driver's license without a Social Security number (61), and offers of health insurance regardless of legal status (17). For example, DACA protections conferred recipients state-issued identification and work permits, which allowed recipients greater mobility, educational attainment, and job advancement (2). In the field of medicine, 65 DACA recipients matriculated into US medical schools in the 2016–2017 academic year (143), increasing the pipeline of Latinx immigrant health care providers. Furthermore, at the community level, families with DACA recipients developed a stronger sense of engagement in their communities (2).

**Social networks.** Immigration policies can also disrupt or enhance social networks, impacting both mental and physical health (56, 66). Immigration enforcement that leads to deportation and detention can often result in the involuntary separation of parents and children (42, 145). This practice can lead to children of immigrants, many of whom are themselves citizens, being left without parents or in the care of a single undocumented parent with limited resources. Negative consequences of family separations include children experiencing high levels of distress, depression, and anxiety (47). Children who are separated from their parents can also experience loss of appetite, poor sleeping, withdrawal, and aggressive behavior (147). Families who lose an adult to detention or deportation may have fewer material resources because of increased parenting obligations and fewer earning opportunities, especially for single undocumented mothers (34).

The protective effects of network ties may be particularly important for undocumented Latinx immigrants because Latinx culture places a high value on close and supportive family relationships and because informal social networks provide access to resources not otherwise available to undocumented immigrants (23). Research has shown that social support can buffer the negative impact of immigration-related stressors (16). Some social support is exchanged through transnational relationships, such as communication with friends and family members in their countries of origin (90, 132). These cross-border ties and strong family relationships can relieve some of the social isolation experienced by undocumented immigrants (15, 125). Research has also found that relationships with other Latinx immigrants, including networks in school, faith, and neighborhood groups, serve an important role in exchanging information and resources among newly immigrated and undocumented Latinx (97, 133).

**Discrimination, mistreatment, and victimization.** Undocumented immigrants also experience discrimination, mistreatment, and victimization related to their race/ethnicity, their countries of origin, and their legal status. Previous studies have shown that perceived discrimination is associated with poor health outcomes among both US-born Latinx and Latinx immigrants (62, 137); however, fewer studies on discrimination and health have focused specifically on undocumented immigrants (28, 69, 123). Common experiences reported in both qualitative and quantitative studies include verbal and physical assault, including mistreatment by immigration and law enforcement as well as racial and linguistic profiling (13, 112, 116, 123). Undocumented immigrants report that discrimination and law enforcement (28, 54). Undocumented Latinx immigrants are often targets of violent victimization because they are commonly paid in cash and are perceived as carrying large amounts of money (35). This vulnerability is exacerbated by the fact that they also have few options for recourse owing to the fear of calling the police if they are victimized.

Anti-immigrant sentiment in political rhetoric and mass media has also increased in recent years, leading to many Latinx immigrants being labeled as foreigners, stereotyped as criminals abusing access to government services, and stereotyped as having a lower social status than white Americans (77, 138). Researchers have noted important regional differences in anti-immigrant sentiment, including the type of discrimination that undocumented immigrants experience and the community resources available to undocumented immigrants. For example, compared with regions such as the Southwest, the Southeast and Midwest United States have fewer social institutions, such as public transportation or extended social networks, available to help immigrants live easily without a visa or driver's license (35, 69). Immigrants in these communities may be more visible and therefore more vulnerable to discrimination (3). Undocumented immigrants living near the United States–Mexico border face unique challenges, including increased presence of immigration enforcement and anti-immigrant citizen groups (112). A study of Latinx living in the Arizona border region found that 40% had experienced immigration-related physical

mistreatment (112). Another study in the same region found that undocumented immigrants reported difficulty finding or keeping housing, finding employment, and using medical services as a result of increased immigration enforcement (123).

### IMPORTANT HEALTH ISSUES AMONG UNDOCUMENTED LATINX IMMIGRANTS

Although there has been limited empirical research on the health of undocumented Latinx immigrants overall, three particular health issues have received more attention. In this section, we highlight health care access, mental health, and HIV as important health issues experienced by undocumented immigrants, including promising strategies for addressing each health issue.

#### Health Care Access

Undocumented immigrants experience several barriers to accessing health care. Their immigration legal status makes them ineligible for most public health insurance programs with the exception of emergency services (27, 48, 53, 130). Even with recent health care reforms such as the 2010 Patient Protection and Affordable Care Act (ACA), which increased insurance coverage to many previously uninsured individuals, undocumented immigrants were excluded from accessing health insurance through Medicaid and state insurance exchanges (48, 130). In addition to being ineligible for public health insurance programs, many are also unable to access private health insurance. Undocumented immigrants typically work in low-wage jobs or as migrant agricultural workers (27). These jobs often have few benefits and are less likely to provide private, employer-based health insurance coverage (27, 48, 53). Their low incomes limit their ability to pay for healthrelated expenses out-of-pocket (53).

Undocumented immigrants may fear that seeking health care could lead to detection by immigration officials or that their use of government services will prevent them from eventually obtaining legal status (107). They may also fear being turned away or being mistreated by health care providers (48, 53). As a result, undocumented immigrants are also less likely to have a regular source of care, to seek preventive services, and to have access to specialty care, increasing their risk for poor overall health (41, 92).

Policies are needed that provide access to both health insurance options and health care (48, 148). Efforts to improve health care access for undocumented immigrants in large US cities have attempted to connect them with consistent primary care (101). For example, New York City's pilot program, Direct Access, used the city's existing system of safety-net resources to provide coordinated access to low-cost health care for undocumented immigrants (83). Owing to the lack of insurance and limited financial means, many undocumented immigrants rely on safety-net health care providers for their care. Similar programs are also needed outside of large urban areas. Undocumented immigrants are increasingly residing in nontraditional immigrant destinations (96), which may lack the infrastructure to effectively serve immigrant populations, such as Spanish-speaking providers or interpreters (27, 63). In these areas, employers have the potential to help undocumented immigrants gain access to health care services. For example, a coalition of employers in Columbus, Ohio, collaborated with community-based organizations to provide basic health care screenings, referrals to medical providers, health education training, and services from community health workers to their low-wage Latinx workers (32).

#### **Mental Health**

Mental health is also an important issue for undocumented Latinx immigrants. Recent reviews found that common mental health concerns experienced were depression, anxiety, post-traumatic

stress, and substance use (43, 122). Although there are no large epidemiological studies of mental health among undocumented immigrants, studies among community-based samples suggest that depression and anxiety are more common among Latina immigrant women, while alcohol use is more common among Latino immigrant men (85, 89–91).

Previous studies have identified determinants of poor mental health and substance abuse at each stage of migration. Prior to migration, poverty and exposure to violence increase undocumented immigrants' risk for depression (89). During migration, undocumented immigrants continue to be at risk for exposure to violence and detention, which can result in post-traumatic stress, depression, and anxiety (43). Once immigrants are in the United States, chronic financial pressures and low socioeconomic status continue to put them at increased risk for poor mental health (45, 100). Undocumented immigrants are often paid low wages, are prone to wage theft, and experience difficult and dangerous working conditions, all of which can lead to increased stress and unhealthy coping behaviors (26, 86). Previous studies including undocumented Latinx immigrants have noted social isolation and low levels of social support, which may further exacerbate the risk for poor mental health (42, 84, 103).

Efforts to address the mental health needs of undocumented immigrants have focused on addressing their limited access to mental health care and developing community-based programs to reduce stress and increase access to services (92). Many community health clinics serving Latinx immigrants have begun to integrate behavioral health services with primary care to identify and serve patients with mental health needs (104). In addition, clinics have begun using community health workers to provide counseling and referral services in both clinical and community settings (33, 120). Community health workers who have a shared racial/ethnic or immigrant background, as well as Spanish language skills, can incorporate social and cultural context and increase access to mental health programs (88, 115). Community-based mental health programs can provide an alternative for those who may be reluctant to seek mental health care in clinical settings owing to fear or stigma (87, 126). Some evidence has also demonstrated that group-based programs can help increase social cohesion and coping strategies among undocumented immigrant women experiencing depression and anxiety (111).

#### HIV

Another particular concern for undocumented immigrants is their risk for HIV. Recent studies have shown that many Latinx with HIV were born outside of the United States, and among those, most are men who have sex with men (MSM) (46). Latinx MSM (LMSM) have a lifetime risk for HIV infection estimated at 1 in 4, compared with the 1 in 11 risk among white MSM (52). Latinx transgender women (LTW) report some of the highest prevalence of HIV. In a recent survey, 4.4% of LTW reported living with HIV, 15 times higher than the overall HIV prevalence in the United States, (59) and some community-based studies have observed even higher proportions (140). While population estimates of HIV among undocumented Latinx are unknown, some researchers have used Social Security and insurance status data to estimate the number of undocumented in HIV care (110). Nevertheless, several studies have highlighted the important role of legal status in HIV risk.

One factor associated with HIV risk is having had traumatic experiences prior to migrating. Many Latinx sexual and gender minorities describe having encountered homophobic and transphobic discrimination, persecution, and violence in their countries of origin (93, 107, 109). Some fear that if they were deported to their countries of origin, they would be at risk of severe violence. Emerging research suggests that fear of deportation may be related to HIV risk; in one study, undocumented LTW reported staying in relationships with abusive partners owing to the fear of being deported, and abuse often co-occurs with HIV (93). Postmigration, several factors contribute to HIV risk, including lack of access to supportive families and steady partners, unstable housing, exposure to higher-risk partners, and lack of access to health care and insurance (74). Undocumented Latinx may not engage with freely available health services for fear of being reported to immigration officials (73, 107). Undocumented Latinx also experience delays in HIV diagnosis (29) compared with Latinx with documentation, blacks, and whites (102).

For Latinx sexual and gender minorities, their intersecting social categories (including legal status, race/ethnicity, sexual orientation, gender, HIV status, and sex worker status) can result in experiences of intersectional stigma and discrimination (64). Discrimination and an internalization of negative messages can result in harmful coping strategies and fewer protective behaviors (80). As a consequence of intersectional stigma, immigrant LMSM and LTW are highly vulnerable to a lack of stable housing and employment, social isolation, and discrimination due to homophobia and transphobia by family members and others; these experiences often co-occur with depression, substance abuse, and HIV (71, 72, 93).

Immigration law recognizes that sexual and gender minorities constitute a "particular social group" who may have credible fear of persecution in their countries of origin (57, 75; 8 U.S.C. § 1158). Many immigrant Latinx sexual and gender minorities have been granted asylum, including the right to work and live in the United States (57, 75; 8 U.S.C. § 1158). Thus, one promising strategy is medical-legal partnerships (MLPs), defined as health care services that integrate civil legal assistance (70). MLPs can help mitigate the effects of discriminatory policies by providing access to social and economic resources (e.g., work authorization, access to public benefits, health insurance, education loans), thus reducing these patients' HIV risk (140). Studies with Latinx immigrants have shown that garnering legal status, such as asylum, can result in access to health insurance, the Supplemental Nutrition Assistance Program, education loans, and job placement assistance, which can ultimately lead to decreased HIV risk (93, 140). Another promising strategy for undocumented Latinx living with HIV is to provide navigation and support for engaging in HIV care using community health workers or other clinic staff (119). Some of the strategies that community health workers use with undocumented Latinx include developing advocacy skills and establishing trust with health care providers (144).

#### **RECOMMENDATIONS FOR FUTURE RESEARCH AND PUBLIC HEALTH PRACTICE**

Previous scholars have encouraged public health researchers to conceptualize immigration and legal status as a social determinant of health, encompassing increased attention on the social and political factors that affect immigrants' health (25, 100, 130). Our review has confirmed that experiences before, during, and after migration shape undocumented Latinx immigrants' health. Below we offer recommendations for future research and public health practice based on our review and our own experiences conducting research with this population. Our hope is that these recommendations can help identify opportunities to reduce health inequities among undocumented Latinx immigrants.

#### **Recommendations for Future Research**

While there is a growing appreciation for the need to understand the health of undocumented Latinx immigrants, there is still much that is unknown about their health status. This lack of data is due, in large part, to the fact that they are not included in research or public health surveillance; in addition, when they are included, their legal status is not known. Below we describe several

directions for future research, including conceptual approaches to improving our understanding of the mechanisms by which legal status affects health, a focus on the impact of immigration enforcement on health, and practical considerations for conducting research with undocumented immigrants.

Researchers have noted that future research should integrate more theoretical and conceptual perspectives (25, 125). We need to evaluate the health impact of social and political factors that immigrants experience at different stages of migration. For example, a stronger focus is needed on the history of an immigrant's country of origin, the immigrant's mode of entry into the United States, and changes to their legal status and health status over time. Some have cited the need for a life-course approach including more longitudinal studies and a focus on intergenerational impacts of immigration (99, 125). Future research could also benefit from more interdisciplinary perspectives. The fields of psychology, sociology, history, political science, and law all have unique perspectives, and together scholars from these disciplines can identify structural interventions that address social and political factors underlying health inequities (19). Similarly, future research should draw on intersectional theories that underscore how aspects of undocumented status may vary by gender, race, sexual orientation, and other social identities (145). Finally, transnational frameworks can help us understand how changes to social networks and family structures in both the United States and countries of origin shape the health of undocumented immigrants (24, 34).

Several important topics also warrant further research. While undocumented Latinx immigrants have always faced discrimination, the current political climate has led to increased antiimmigrant sentiment, increased enforcement of immigration laws, and stricter limitations on social services. Researchers have begun to explore how the current political and social climate affects undocumented immigrants; however, more studies are needed to document the impact of discrimination and immigration enforcement on health. In addition, as undocumented immigrants stay in the United States for longer periods of time, the number of mixed-status families grows. Future studies should focus specifically on how documentation status impacts different family members, including children who are citizens. Similarly, although a variety of legal status categories exist, residents' status can change over time. Future research should compare health outcomes across immigration legal status categories and assess the impact of changes over time. Another limitation of the current literature is that most studies have focused on regions of the United States where there are large undocumented immigrant populations, such as border states or the US Southeast. More research is needed across different contexts of the United States, for example, in states where Latinx populations are growing, such as Maryland, Virginia, and Massachusetts. Furthermore, US scholars should collaborate with researchers in other regions with restrictive immigration policies, such as the European Union.

Given the need for more research, it is also important to consider the best methodological approaches to conducting research with undocumented Latinx immigrants. Previous reviews have highlighted different approaches for identifying and assessing legal status among immigrant populations (99, 142). While most previous research has used indirect ways of determining legal status through process of elimination, it has become more common to ask participants to self-report their legal status (12, 142). Researchers can preface the question by reinforcing that they do not share information with immigration authorities, while also including an explicit option to decline. Asking participants to self-report is the most accurate way to determine legal status but requires that researchers have established trust with participants and have systems in place to protect the confidentiality of their data.

Community-engaged research approaches are critical to building trust with marginalized communities, such as undocumented immigrants (106, 146). Frameworks for conducting communityengaged research stress the importance of authentic collaborations with community partners, including providing substantial input on the selection of health issues, the study design, and methods (134). This approach requires researchers to build relationships with established and trusted community organizations serving undocumented immigrants. Some churches and communitybased organizations have received designations as sensitive locations, which ensures a sanctuary status so that immigration officials cannot conduct enforcement activities on their property. Community-based organizations may be more eager to partner if the research will also benefit their organization. Building and maintaining these relationships can take time but, in the long run, will help ensure that staff and clients feel comfortable participating in studies and disclosing their legal status.

Working with community-based organizations serving undocumented Latinx immigrants can be an effective approach to recruiting these individuals to participate in health research (105, 108). Staff at community organizations are often aware of the best ways to reach these populations and any recent immigration enforcement in the community that could impact outreach efforts. In addition, staff at social service agencies, churches, shelters, and schools often have experience working with undocumented immigrant populations and can provide helpful input on study design and methods. Researchers may also benefit from connecting with existing networks, coalitions, or academic–community partnerships working with immigrant communities.

There are also several best practices for collecting data from undocumented immigrants. Research materials including consent forms, interview guides, and surveys should be provided in the participants' preferred language and easy for those with low literacy to understand. While the preferred language is most often Spanish, immigrants from indigenous communities in Mexico and Central America may speak other languages. Collecting information in person may help participants feel more at ease and better understand the questions. Research staff should have empathy, warmth, sensitivity to experiences of violence and trauma, and an ability to communicate the importance of the research and their participation. Maintaining data security and participant confidentiality is also critical. Cognitive interviewing or other types of formative research can be helpful for testing and modifying measures to make sure that they are valid and well understood.

Retention of undocumented immigrants in research studies can also be a challenge because of competing demands and the precariousness of participants' lives. For example, employment can be unstable and unpredictable. In addition, many undocumented immigrants frequently change phone numbers and housing owing to employment conditions or immigration enforcement. To overcome these challenges, it can be helpful to conduct research activities at community-based organizations where undocumented immigrants regularly seek services. Another strategy is to maintain contact through social media channels, which are less likely to change even if a phone number changes. While completing data collection online or over the phone is an appealing strategy for reaching mobile populations, researchers must be sensitive to the low literacy and education levels of many undocumented Latinx immigrants.

Participating in research studies may provide additional benefits to undocumented Latinx immigrants. Because they often lack valid forms of identification, undocumented immigrants may need to provide documentation related to their time in the United States or for social services. Researchers can provide reference letters for applications or immigration cases attesting to their participation. Research staff may also be able to connect them to services they are not receiving. Finally, because undocumented immigrants are often an invisible population, they may value the opportunity to tell their stories and help others by participating in a research project.

#### **Recommendations for Public Health Practice**

We have identified some promising strategies for addressing some of the most critical health needs of undocumented immigrants, but more research is needed to further develop and evaluate similar programs. Research on health promotion programs targeting all Latinx immigrants has shown that this population can benefit from programs that validate their lived experiences, help them cope with migration-related loss and trauma, incorporate cultural strengths, and build social ties with other immigrants (43, 88, 111). Future evaluations of these programs should include undocumented immigrants and report findings across legal status subgroups to enhance the generalizability and validation of research findings.

Community health centers currently provide the most care for the undocumented (101). Many are actively committed to providing culturally and linguistically appropriate services, as well as navigation to social services that can help address social determinants of health. Some convene support groups for immigrants or conduct community organizing activities that can enhance community resilience and strengthen social networks (119). However, many of these organizations are overstretched and do not receive adequate reimbursement for their work. The health of the undocumented can be improved by supporting these centers, through either local insurance programs or additional funding (17, 118). Providers within community health centers serving the undocumented should share clear information about clients' rights and the services available to them. Community-based organizations can also help provide education about legal rights through know-your-rights presentations and attorney referrals (140). These resources can help to alleviate deportation-related anxiety and can provide information about confronting and reporting abuse.

Changes in immigration policies have the potential to have the largest impact on the health of undocumented immigrants. While federal immigration reform has so far been limited, local policies can alleviate immigration-related stressors and increase access to affordable health care. For example, state and local governments that allow the undocumented to obtain identification or driver's licenses can help them gain legitimacy or residency and to increase access to resources to improve their health (61). Similarly, sanctuary city policies that restrict local law enforcement from cooperating with immigrant enforcement can help undocumented immigrants feel safe to move freely in their communities (100). Local and state policy changes can be initiated through coordinated advocacy campaigns, including community organizations, health departments, elected officials, law enforcement, and business partners (38; http://www.washtenawid.com).

#### **CONCLUSIONS**

Our review highlights several factors that shape undocumented Latinx immigrants' health. More research is needed to inform public health programs and policies that can help address the negative effects of trauma, immigration enforcement, disrupted social networks, and discrimination. Public health researchers should not shy away from including undocumented immigrants in their research; instead, we should thoughtfully engage these communities to understand and address their health needs. Public health practitioners can continue to support and advocate for programs and policies that create healthful social and political environments for undocumented Latinx immigrants.

#### SUMMARY POINTS

1. Many undocumented Latinx immigrants experience difficult conditions before, during, and after migration. Future research should focus on how social and political factors such as exposure to trauma, increased immigration enforcement, changes in social networks, and discrimination negatively impact their mental and physical health.

- 2. Undocumented Latinx immigrants face many barriers to accessing health care, including lack of health insurance and high costs of care. They need access to affordable health and social services without fear of deportation or detention.
- 3. Undocumented Latinx immigrants are at increased risk for poor mental health owing to immigration-related stressors and limited access to mental health care. Community-based programs, including the use of community health workers, can help address their mental health needs.
- 4. Undocumented Latinx immigrants face unique intersectional issues that impact their HIV risk. Promising strategies to reduce risk include medical–legal partnerships and patient navigation programs to increase access to care.
- 5. Future health research, including the evaluation of public health programs, should report outcomes across legal status categories so that we can better understand and address inequities.
- 6. Conducting research with undocumented Latinx immigrants requires community engagement, assurance of confidentiality, and creative recruitment and retention strategies.
- 7. Community health centers and community-based organizations serve as the primary safety net for undocumented immigrants. They provide culturally and linguistically appropriate services but are often overstretched and underfunded.
- 8. Public health practitioners should advocate for local policy changes to create healthful social and physical environments and increase access to health and social services.

#### **DISCLOSURE STATEMENT**

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review. This content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health or the Agency for Healthcare Research and Quality.

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