Clinical Review

The Impact of COVID-19 in the Latinx Community

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Abstract

Description
The COVID-19 pandemic has intensified the existing health and social disparities that affect minority groups in the United States (US), including the Latinx community. This situation has been reflected in many aspects of health, including increased morbidity and mortality, and reduced adherence to medical and scientific recommendations. Limited access to health care, financial challenges, migrant status, and health illiteracy, or lack thereof, have all hampered the Latinx community’s ability to seek aid quickly and to be tested or treated effectively for this disease. This pandemic has shown that the Latinx community’s socioeconomic status correlates with greater mortality rates when compared to other ethnic groups, which runs counter to historical norms. Furthermore, morbi-mortality in Latinx people has been disproportionately greater. Beyond the systematic barriers that the Latinx community has had to face to access care during the pandemic, there were also perception barriers that increased the gap and further complicated the situation. Latinxs were more likely to be exposed due to a decreased compliance with physical distancing. When it was suggested to avoid crowds, many people started using delivery services; however, many Latinxs found the cost and requirements of reliable internet to be a barrier to using these services. Currently, COVID-19 vaccines are broadly available in the US but there has been skepticism from marginalized communities, including the Latinx population, about getting vaccinated. Integrating this population into a welcoming healthcare system, safeguarding their immigration and work status, providing more accessible vaccination locations, and promoting health equality and education would all assist to lessen the impact of this illness on the Latinx community.

Keywords
health disparities; health care inequalities; public health; Latinx; Latinos; Hispanics; COVID-19; Coronavirus Disease 2019; SARS-COV-2 infection; health equity

Introduction
The COVID-19 pandemic has intensified the existing health and social disparities that affect minority groups in the United States (US), including the Latinx community. This situation has been reflected in many aspects of health, including increased morbidity and mortality, reduced adherence to medical and scientific recommendations, and less access to healthcare. In this article, we review the specific population and cultural characteristics of the Latinx community with the purpose that it may serve as a catalyst to address gaps and concerns, reduce healthcare inequities, increase compliance, and improve health and social-related short- and long-term outcomes. It is important to dissem-
community being disproportionately impacted by poverty and other stressors classically associated with reduced life span.²

Prior to the COVID-19 pandemic, Latinx people enjoyed a longer life expectancy with lower all-cause mortality than same age and gender peers who identified with other ethnic groups. However, throughout the pandemic, this paradox was shown to rapidly reverse, as many Latinx groups experienced high rates of mortality, both with and without comorbidities that are classically linked to higher mortality in COVID-19 patients.³

The impact of COVID-19 on the Latinx population has been particularly profound within the population of adults over the age of 55. While this group is traditionally considered at high risk for COVID-19, Latinx adults within that population have higher age-adjusted mortality than any other ethnic group.⁴ This is particularly troubling given that the mortality per age was lower in the Latinx population than in other populations for most other causes of disease.

Since early in the pandemic, the Latinx community has been disproportionately impacted, both in terms of health outcomes and loss of livelihood secondary to mitigation strategies. According to recent projections, the life span of the Latinx population is estimated to drop by 3 years as a result of the pandemic, bringing their life expectancy close to that of the general population.⁵

**Characteristics of the Population**

Approximately 62 million Latinxs are living in the US, representing 18.5% of the total population. One in 6 adults and 1 in 4 children in the US identify as Latinx.⁵ Furthermore, 59% of Latinx are 35 years and younger compared with 46% of the general population.⁶ The majority of the Latinx population in the US is represented by those of Mexican, Puerto Rican, and Cuban descent.⁷

Compared to White individuals, Latinxs between 25 and 34 years old are less likely to have a college degree and 59% of this cohort have only a high school degree.⁷ Moreover, 28% of Latinxs in the US have less formal grade school education and are 5 times less likely to complete high school. Regarding earnings, data from 2018 revealed full-time employed Latinxs earned 26% less when compared with White workers.⁷

These characteristics, along with a lack of medical insurance, other financial limitations, low health literacy (HL), low English proficiency (EP), legal concerns relating to immigration, as well as multiple other concerns,⁵ place the Latinx community at higher risk for disparities and negative health outcomes. In fact, each of these factors may represent a potential barrier to accessing appropriate healthcare, a situation that was evident during the COVID-19 pandemic.

**Limited Access to Healthcare**

Historically, the Latinx population has had reduced access to healthcare.⁵ In 2019, 18% of the Latinx population and 6.3% of White people didn’t have healthcare access, according to the US Census Bureau.⁸ In addition, during the last several years, 21% of the Latinx community did not see a doctor due to high costs, compared with 13% of White people.⁸ It is important to note that Latinx communities often face considerable bias, affecting their physical, mental, and social health.⁹

Since the beginning of the pandemic, limited access to COVID-19 testing presented a barrier to controlling the spread of the infection in the Latinx community. In a study from New Jersey, Latinx individuals reported primarily getting tested at public test centers because they were unable to afford the private testing cost.¹⁰ Latinx people were more likely to reach testing sites by walking or using public transportation, while also feeling unsafe traveling to testing centers due to crowding and waiting times, which ultimately increased their risk of getting infected.¹¹

**Social Characteristics**

Many Latinx members have to deal with financial hardships which force them to live in crowded environments with limited access to public transportation and food.⁵,¹¹ Those living in low-income areas have been exposed to a 65% higher risk of contracting the virus compared to the risk to those living in wealthier areas. According to the Centers for Disease Control and Prevention (CDC), the increased risk of infection has also been related to lifestyle...
factors in the Latinx community, such as the tendency to have larger households, compared to the non-Hispanic, White population.\textsuperscript{12}

**Work Conditions**
The Latinx community is primarily employed in areas of the workforce with a higher risk of infection, such as factories, farms, and retail stores; they often hold jobs that cannot be done remotely. Many work in service-based industries that were deemed “essential” during the pandemic.\textsuperscript{8}

Additionally, non-Hispanic, White households have an average of 1.2 wage earners per home, while the average Latinx household has 1.6 wage earners. This difference implies that more adults per Latinx household left the home to go work, risking exposure and potentially bringing the infection home.\textsuperscript{9}

In addition, people in the Latinx community also admitted that the decision to not get tested for COVID-19 was influenced by their inability to work if they tested positive. There is no paid sick leave in the jobs that many Latinx people work.

**Migratory Status**
Many members of the Latinx community are of lower socioeconomic status and a part of this population does not have a stable migratory status. The fear of legal consequences including deportation if they seek medical care, along with being uninsured, are barriers to accessing healthcare. Undocumented individuals are also unable to apply for government benefits. Therefore, they feel compelled to continue working while being exposed to the virus, with limited options to quarantine or protect themselves or their families.\textsuperscript{5}

In New York and Chicago, Latinx individuals reported that immigration status was a contributing factor for disparities during the pandemic; only 23% of 17 049 participants had insurance, while 64% admitted to being undocumented, which impacted access to care.\textsuperscript{15}

A recent study revealed that 35% of Latinx participants believed that healthcare would be denied as a result of their migratory status; they feared that seeking medical attention or taking a COVID-19 test would bring negative attention to them. They also feared that they would be considered “undesirable citizens,” placing their livelihood at risk.\textsuperscript{11} As a result, many Latinx people did not seek healthcare at the appropriate time, thus causing delays in receiving medical treatment and in many cases, worse outcomes.

**Health Literacy and English Proficiency**
It has been reported that in the US, 41% of Latinx adults lack basic HL and only 4% have proficient HL at the level necessary to make informed health decisions.\textsuperscript{12} Low HL has been identified as a significant barrier to healthcare access and appropriate service utilization. This translates to an increased probability of having poor health, higher rates of chronic disease, and two times higher mortality risk when compared to those with adequate HL.

These poor outcomes appear to be compounded by a lack of EP. In fact, data suggest that Spanish-speaking immigrants with low health literacy are at a particularly high risk of negative health outcomes.\textsuperscript{5} Additionally, a recent article reported that racial minority status and limited EP increased the COVID-19 incidence rate by 21.7% and the mortality rate by 17% as a result of the presence of comorbidities, crowded housing, and a reliance on public transportation.\textsuperscript{5}

**Morbidity**
Latinx people represent approximately 33.8% of COVID-19 cases nationwide.\textsuperscript{13} At Mount Sinai Health System in New York, the Latinx community had a positive COVID-19 test rate of 23-30% compared to a rate of 12-17% in the White community. In California and Texas, where Latinx people represent 39% of the population, 39% and 35% of COVID-19 cases were attributed to this community, respectively.\textsuperscript{14} In 2021, Brown et al.\textsuperscript{15} reported that in North Carolina, the Latinx community represented 21% of COVID-19 cases, despite being only 9% of the total population in that state.

When further stratified, data from the CDC showed that the relative risk of admission to the hospital was 1.35 times higher in Hispanic White patients (HW), 1.58 times higher in
Hispanic Black patients (HB), and 1.50 times higher in Hispanic multiracial/other patients (HM) (P < .001), when compared to non-Hispanic, White patients (NHW).16

Similar to the initial results, the latest CDC update from July 16, 2021, indicated that Latinx people have 1.9 times increased risk for COVID-19 infections than White, non-Hispanic people. Daily infection rates among Latinx people in the US are now the highest among minority groups, with an overall 28.5% of cases.17

**Mortality**

Among the Latinx population, the death rates related to COVID-19 accounted for a total of 18.6% in all age groups.17 Early in the pandemic, when New York City became the epicenter, the COVID-19-related mortality of Latinx patients was 236 per 100,000, almost double the death rate of White and Asian patients. Later, there were peaks of a more than 90% excess in mortality among Latinx people in April, July, and December 2020, with a mortality incidence rate of greater than 1 excess death per 100,000 person-years.18

According to the National Center for Health Statistics, 22% of the COVID-19 deaths in the US were from Latinx patients. Specific data from California revealed that this community made up 60% of cases and 48.5% of deaths secondary to COVID-19.19

When evaluated by subgroups, the CDC reported a mortality relative risk of 1.36, 1.72, and 1.68 (P < .001) times higher in HW, HB, and HM patients, respectively, compared to NHW patients.17 Some of this increased risk may be attributed to the fact that HB patients have risk factors for severe COVID as cardiometabolic comorbidities. However, HM patients were found to have greater ICU admissions, mechanical ventilation, and incidence of death despite lower levels of several comorbidities.

**Economic Impact of COVID-19**

During the course of the pandemic, about 50% of Latinx people or someone close to them had health and/or economic hardships.20 Based on data from a Pew Research Center report,21 the COVID-19 pandemic significantly affected not only the health of Latinx people but also their economic situation and quality of life. In fact, the rate of unemployment for Latinx people increased to 4.8% in February 2020, increased to 18.5% in April 2020, and then decreased to 14.5% in June 2020.21

In May 2020, about 59% of the Latinx community compared with 43% of US adults of other races/ethnicities reported living in households that experienced a firing from a job or wage cuts due to the COVID-19 outbreak.22 By August 2020, about 62% of Latinx people had experienced some type of financial hardship, significantly higher than the rate among all US adults. Latinx people reported having more difficulties paying debts (35% versus 25%) and getting meals from a food pantry or other charities (31% versus 17%). As well, many Latinx people reported other hardships such as challenges paying for healthcare (19%), receiving jobless benefits (17%), and losing medical insurance (11%).23

Those who were undocumented reported more challenges than the rest of the Latinx population. Approximately 50% of Latinx immigrants without a permanent immigration status had had a hard time paying debts, compared to those with permanent status (35%) or naturalized US citizens (26%).23

**Perceptions and Behaviors of the COVID-19 Pandemic**

Beyond the systematic barriers that the Latinx community had to face in order to access care during the pandemic, there were also perception barriers that increased the gap and further complicated the situation. At the beginning of the pandemic, women (27.9%), Black people/African Americans (36.15%), and Latinx people (32.8%), especially those living below poverty level, believed that they were “not at all likely” to get COVID-19, compared to the perception of males (19.7%), White people (17.5%), and non-Hispanic people (22.3%).24 Although recommendations to reduce the risk of infection and transmission have been shared with the community, if the perceived risk of getting COVID-19 is low, people are less likely to be compliant with preventive measures, leading to higher rates of infection, placing their families and the entire community at risk.25
Latinxs people were more likely to be exposed due to a decreased compliance with physical distancing. When it was suggested to avoid crowds, many people started using delivery services; however, many Latinx people found the cost and requirements of reliable internet to be a barrier to using these services.\textsuperscript{26}

Despite the high risk of mortality, many Latinx individuals indicate they do not fear the virus or take themselves away from work and other responsibilities due to it. In a study conducted in May 2020 in Maryland, over 97\% of Latinx individuals reported feeling they were at low risk for infection, more than 85\% of individuals reported they never kept a social distance, and more than 71\% denied ever wearing a mask.\textsuperscript{25}

In spite of the perception of Latinx people as having a low risk for COVID-19 infection, a recent study noted that this population was the only one with a higher perception of the infection as a crucial threat to the community, themselves and their families, compared to White, Black/African American, and Asian American respondents.\textsuperscript{27}

However, even though the Latinx population was deeply concerned about the possible negative outcomes of COVID-19, another study demonstrated that non-White people (Black: 25-64\%, Latinx: 22-33\%) were significantly more likely to support public figures who advocated for ignoring or distrusting COVID-19 experts (scientist and medical providers/doctors), and not following preventive recommendations such as using masks and social distancing.\textsuperscript{28}

In fact, Karout et al.\textsuperscript{25} noted that when asked about preventive behavior, 70\% of Latinx people included in the study reported using hand sanitizers only occasionally, while 71.2\% and 85.4\% respectively admitted that they neither wore facial masks nor kept social distance.

Within the younger population, there was evidence of the Latinx population having more trust in guidelines. According to a study among college students, Latinx students were more likely than non-Hispanic students to believe that wearing a mask (71\% vs. 58\%, $P = .001$), social distancing (37\% vs. 32\%, $P = .017$), and hand hygiene (77\% vs. 67\%, $P = .013$) were all highly essential.\textsuperscript{24}

### Vaccination Perceptions

The first COVID-19 vaccine was officially approved by the Food and Drug Administration (FDA) in late December 2020 for people above 16 years old. After that, two more vaccines were approved for individuals above 12 years old. Currently, vaccines are broadly available in the US but there is an evident skepticism from marginalized communities, including the Latinx population, about getting vaccinated.

Given the importance of vaccination to alleviate the devastating effects of this pandemic, multiple studies evaluating vaccine acceptance rates were conducted from the beginning of the pandemic. Several studies targeted marginalized groups, such as the Latinx community, who were known for their high hesitancy regarding vaccination. With data pertaining to pre-COVID-19 vaccine approval, a cross-sectional study conducted by Shekhar et al.\textsuperscript{29} amongst healthcare workers (HCW) reflected that vaccine acceptance rates among Latinx HCW were the second-lowest of any ethnic group. Results from this study revealed that 9.8\% of Latinx respondents said they would not receive the vaccine, 60\% would wait for a review, and only 30\% would accept the vaccine immediately.\textsuperscript{29} The high vaccination hesitancy among Latinx HCW was concerning since HCW serve as examples to their respective communities regarding healthcare decisions.

A recent review by Khubchandani et al.,\textsuperscript{30} which included 107,841 adult Americans, revealed an overall prevalence of COVID-19 vaccination hesitancy of 26.3\%, compared to 30.2\% among Latinx adults. The greater predictors of vaccine hesitancy can be attributed to sociodemographic characteristics, medical mistrust, and a history of racial discrimination. Other reasons included misinformation, perceived risk of getting infected, beliefs about vaccines, and concerns about the safety and efficacy of COVID-19 vaccines.

Khubchandani et al.\textsuperscript{30} also emphasized the disconcerting fact that Latinx and African American people were at higher risk of morbidity and mortality if they did not receive the vaccine. These groups have a higher prevalence of cardiovascular comorbidities that lead to poor health outcomes, which could worsen their prognosis if they become infected with...
COVID-19. Also, misinformation provided through social media platforms contributed to hesitancy towards vaccination.

An ongoing survey reported that 63% of Latinx people have currently received at least the first dose of the vaccine, 7% will acquire it as soon as possible, 14% will consider it, 5% will get it only if required, and 10% will not get vaccinated. These results may be attributed to the fact that ongoing vaccination campaigns and vaccine availability have shifted the mentality of the Latinx community towards vaccination. In this survey, the Latinx respondents, who considered the vaccine, expressed that they were concerned about the long-term effects of the vaccine, serious adverse effects, safety and effectiveness, and the risk of getting COVID-19 from the vaccine.

Regarding COVID-19 vaccine approval for children under the age of 12, 29% of Latinx parents said their children would get it right away, 47% would consider it, 12% would vaccinate their children only if required, and 12% said their children were definitely not getting the vaccine. The data demonstrated that initial hesitancy levels for vaccination were reduced among the Latinx community, but hesitancy remained a significant factor in the health outcomes of the Latinx population.

Unfortunately, many theories regarding COVID-19 vaccines created widespread misinformation and distrust that affects the general population and increased vaccine hesitancy of the vaccine. Rumors that vaccines could cause harmful effects such as DNA change, the existence of tracking devices, infertility, cancer, and mutations, among others, have been reported in the Latinx community. Other factors that contributed to this hesitancy include skepticism about rapid vaccine development, concerns that clinical trials were rushed, and a perceived lack of transparency regarding vaccine effectiveness. Multiple medical organizations in conjunction with medical journalists have been trying to debunk these myths as part of a key strategy to reach a wider population and increase willingness to receive the vaccine. However, there is still much more work to do among the general population and the Latinx community.

Conclusions and Recommendations

The COVID-19 pandemic has highlighted healthcare disparities in the US among marginalized groups. The Latinx community is the largest minority group in the US, constituting approximately 20% of the total population. The relationship between the Latinx population and COVID-19 has been complicated, and a well-documented history of discrimination has degraded much of the trust the Latinx population has in the healthcare system. This challenging situation has been further exacerbated by fears regarding how accessing healthcare may be impacted by a patient’s immigration status.

The burden of morbidity and mortality from COVID-19 in minorities has highlighted significant racial and ethnic disparities. According to the most recent data, the age-adjusted hospitalization rates for individuals that identify as Latinx were 4 times higher than that of NHW people. Rates of COVID-19–related deaths were significantly higher in Latinx populations as well.

Besides the higher risk of morbi-mortality, the Latinx community has expressed hesitancy toward vaccination because of the racial injustice and discrimination they have experienced in the past. The need for Spanish-speaking medical interpreters, easily accessible vaccination sites, and the requirement to present personal information documentation create hesitancy within the Latinx community. It is important to note that undocumented immigrants who lack appropriate documentation to obtain the vaccine are concerned about the fear of deportation; therefore, they avoid vaccination.

As Latinx people represent a high percentage of those affected by COVID-19, several strategies should be taken into consideration to mitigate their hesitancy. Integrating marginalized communities into healthcare programs that will teach them the benefits of vaccines and will assure them that their immigration status and employment will be protected when they receive the vaccine is crucial. Promoting health equity for minority groups will alleviate the disparities and will help mitigate vaccine hesitancy and improve compliance with preventive
measures. All these will serve as a step toward alleviating and preventing the burden that this disease has caused and is still causing.

Conflicts of Interest
The authors declare they have no conflicts of interest.

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