

ORIGINAL RESEARCH

Contributing Factors to Delays in COVID-19-Related Hospitalization Among Latinx and Spanish-Speaking Patients/Factores Que Contribuyen a Retrasos en Hospitalizaciones Relacionadas con COVID-19 Entre Pacientes Latinos e Hispano-Hablantes

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Background: Latinx populations have been more heavily impacted by the COVID-19 pandemic than the general population of the US, including higher rates of hospitalization due to COVID-19 in eastern Massachusetts. We conducted a qualitative study to better understand the experiences of Latinx and Spanish-speaking patients who had clinically significant COVID-19 in the early months of the pandemic.

Methods: Thirteen qualitative, semistructured, phone interviews were conducted between December 2020 and April 2021 with Latinx and Spanish-speaking patients who had experienced clinically significant COVID-19 in the metro-north Boston area. Interviews were recorded and transcribed in their original languages. An a priori code tree was developed which was later iteratively revised based on emerging themes. Transcripts were thematically analyzed.

Results: Participants discussed their overall experiences contracting the COVID-19 infection, as well as their experiences with the disease and with being hospitalized and the months after in recovery. Family and social networks were a common support, both emotional and financial. Although they survived the disease, hospitalization had serious impacts on the mental and physical health of participants, including the remnants of trauma from hospitalization itself.

Implications: Latinx and Spanish-speaking patients in eastern Massachusetts had specific experiences in the early months of the COVID-19 pandemic that were shaped by their living conditions and culture. It is important for health care professionals to understand these experiences so that they can design appropriate medical interventions as well as target outreach efforts that are culturally appropriate. Finally, serious attention should be paid to the mental health-related consequences of hospitalization and policies that can alleviate them. (J Am Board Fam Med 2023;00:000–000.)

Keywords: Community-Based Research, COVID-19, Culturally Sensitive Research, Health Services Accessibility, Hispanics, Hospitalization, Latinx, Massachusetts, Mental Health, Qualitative Research

Introduction

It is well-established that in the United States (U.S.), Latinx populations have been more heavily impacted by the coronavirus disease 2019 (COVID-19)

pandemic than the general population, including with higher rates of infection,¹ rates of hospitalization, and death rates.² In Massachusetts, this pattern was clear from the early months in the pandemic.³ A preliminary analysis of electronic medical record

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data at a safety-net health system in eastern Massachusetts from 2020 showed that Spanish-speaking patients with a COVID-19 diagnosis were 3 times more likely than the general population to be hospitalized after a respiratory clinic visit.⁴

To date, most explanations for this disparity have hinged on quantitative work. Hypotheses for the higher rates of infections among Spanish-speakers include a higher rate of frontline workers, higher-density housing situations and multi-generational households,^{5,6} and greater logistic and social difficulties with social distancing.⁷ It has been hypothesized that disparities in hospitalization and mortality are related to these populations' higher rates of underlying health risk factors such as chronic illnesses, although Huguette et al⁸ found that Latinx patients had among the lowest rates of pre-existing conditions among people presenting with COVID-19 at community health centers. A second hypothesis points to Latinx populations' more severe disease on hospitalization due to delay in seeking care.⁹

Little qualitative work exists that explores the social context of these delays in seeking care for COVID-19. We found 1 study drawing a connection between delay in care seeking and economic and immigration-related vulnerability,¹⁰ and another mentioning the emotional impact of contracting the virus.¹¹ There is also a small body of work on the impact of hospitalization on emotional wellbeing, including associations between social isolation and decline in wellbeing.¹² We are not aware of studies that explore the ways that decisions to seek care for COVID-19 are made in the context of social support networks.

In this study, we describe our qualitative research with people who survived clinically significant COVID-19 during the first months of the pandemic. We focus our description on participants' perceptions of where they caught the virus, experiences with social distancing, views about care-seeking and hospitalization, and the emotional, economic, and physical impacts experienced as a result of illness, social isolation, and hospitalization. The objectives of this study are to better understand the experiences of Latinx and Spanish-speaking patients who experienced clinically significant COVID-19, and to understand whether underlying factors impacted the likelihood of experiencing clinically significant COVID-19.

Methods

Setting

This study was conducted at Cambridge Health Alliance (CHA), a safety-net community health care system in Eastern Massachusetts. CHA serves more than 140,000 patients in Boston's metro-north region, with 42% of patients speaking a language other than English.¹³ Within the first weeks of the pandemic, CHA created a model to support patients with mild illness at home, see higher-risk patients in person at a newly created Respiratory Clinic, and recommend hospitalization for clinically significant illness.

Recruitment

We recruited participants from a database of patients who had been very ill due to COVID-19. We used purposeful sampling to include different perspectives. Eligible participants met the following criteria: (1) be 18 years or older; (2) self-identify as Latinx and/or primary language of care is Spanish; (3) able to speak English or Spanish; (4) had COVID-19 infection, defined as having a positive COVID-19 polymerase chain reaction (PCR) test or a clinical diagnosis; (5) had clinically significant COVID-19, defined as either being hospitalized or seen in the emergency department within 30 days of being diagnosed or were seen in CHA's Respiratory Clinic with an oxygen saturation of less than 95%. We originally used Spanish-speaking as a proxy for ethnicity because language is more reliably populated in the EMR, but added ethnicity in the criteria when we did not have enough patients to recruit. This resulted in recruitment of both Spanish and English speakers. During the first few months of the pandemic, "clinically significant" was often used to signify patients who were worried enough about their symptoms to overcome their fears and go to the hospital.

Study participants were recruited on answering a phone call, could accept or decline participation at any time, and if willing could choose to complete the interview in the same call or schedule for a later time. At the end of the interview participants were offered a gift card as an appreciation for their time.

Data Collection

We developed an interview guide to explore people's experiences with clinically significant COVID-19, including where they thought they contracted it,

where they sought help, their experiences in the hospital, and their perceptions of why they became sicker than other people. These themes were developed collaboratively among our interdisciplinary team to explore the hypotheses generated by a prior quantitative study. Interviews were 30 to 45 minutes long and were conducted by members of the research team, all whom completed a training in trauma-informed interviewing. Interviews were conducted between December 2020 and April 2021 using a semistructured interview approach; interviewers met regularly to review findings and iteratively refine the interview guide. We added questions about participants' perceptions of the COVID-19 vaccine after it was launched. We continued interviewing until we determined through a qualitative inductive process that we had reached a point of thematic saturation.^{14,15} We acknowledge that generating our themes in consensus as a team likely yielded different results than a participant-led theme identification process.

Analysis

Interviews were audio recorded, transcribed in the original languages, and cleaned to remove identifying information. A hybrid inductive/deductive approach was then used to analyze the data¹⁶: first an a priori code tree was developed from the original themes of interest. Then, 3 members of the research team each coded 1 transcript, making notes of themes that were not captured. The code tree was collaboratively revised with feedback from the full team. Two bilingual members then coded the full data set using the qualitative analysis software Dedoose. The data were then analyzed using principles of thematic analysis.¹⁷

Results

We originally identified eighty-seven people as potentially meeting our study criteria. We then began calling people selected at random from our list. We attempted to contact fifty-one people (57% were female and 61% spoke Spanish as their primary language). We were unable to contact 28 people (including 4 people that were deceased), and 10 refused to participate when contacted. When we achieved thematic saturation, there were 36 people remaining on our list who had not been contacted. Thirteen total interviews were completed. Of our 13 participants, 10 were hospitalized, and 5 were

intubated during their stay. Participants were primarily female (85%) and preferred Spanish (85%). There was a wide range of ages represented, but the majority were more than 50 (69%) (see Table 1).

Perceptions of Where They Contracted COVID-19

Participants discussed where they believed they contracted the virus. Many perceived routes of transmission point to vulnerabilities related to social determinants of health (SDOH). Although a few pointed to family members within their households as the likely source, a greater number perceived that they contracted the virus from family members who visited them at the beginning of the pandemic. Participants explained that it was very difficult to stop gathering, even though they knew it was dangerous. One participant described the emotional impact that social distancing had on her family:

Pero sí, fue muy difícil, muy difícil y como le dije, nosotros como latinos somos muy apegados a la familia y con mi hermana somos muy unidas y mis primos y hasta ahora no hemos podido reunirnos así como lo hacíamos antes por esa cuestión de la pandemia, ¿no?... Y lo otro también es que a mi mamá también le afectó muchísimo después del virus, ella quedó emocionalmente y mentalmente muy afectada... Y lo que

Table 1. Characteristics of Interview Participants (N=13), December 2020-April 2021

Characteristic	N (%)
Gender	
Man	2 (15%)
Woman	11 (85%)
Age group	
20-29	1 (8%)
30-39	1 (8%)
40-49	2 (15%)
50-59	6 (46%)
60-69	3 (23%)
Hospitalization due to COVID-19*	
Yes, hospitalized due to COVID-19	11 (85%)
No, not hospitalized due to COVID-19	2 (15%)
Intubation due to COVID-19	
Yes, intubated due to COVID-19	6 (46%)
No, not intubated due to COVID-19	6 (46%)
Unknown	1 (8%)
Language of interview	
English	2 (15%)
Spanish	11 (85%)

*As indicated in their electronic medical record (EMR).

extraña es que antes venían todos a visitarla, compartían con ella, jugaban cartas y ahora eso ya no se puede hacer. //But yes, it was very difficult, very difficult and as I told you, we as Latinos are very attached to the family and with my sister and my cousins we are very close and until now we have not been able to meet like we did before because of that issue of the pandemic, right? . . . And the other thing is that my mom was also affected a lot after the virus, she was emotionally and mentally very affected. . . And what she misses is that before they all came to visit her, shared with her, played cards and now that can no longer be done.

Another handful of participants believed that they contracted the virus from either neighbors within their building or roommates. Most people in the area live in multi-family homes, where they may share stairwells and other common spaces with neighbors. Many immigrants also have family renting multiple units in a home.

. . . y bueno, la cuestión es que la vecina de arriba, ella fue la que agarró el virus. . . ella era la persona como que no creía en eso de las máscaras. . . Y no dijo de que estaba enferma nada entonces ella es la cuñada de mi hija, y el esposo de ella pues subía arriba y él trajo el virus para aquí abajo. // . . . and well, the point is that the neighbor upstairs, she was the one who caught the virus. . . she was a person who didn't believe in that thing about masks. . . And she didn't say anything about being sick, and anyways, she's my daughter's sister-in-law, and her husband, well, he went upstairs and he brought the virus down here.

Finally, another group pointed to workplaces as the source of transmission, including 1 participant working at a nursing home. One participant said they likely contracted the virus at a laundromat. A few participants did not know where they contracted the virus.

Family, Friends, and Community

Many participants leaned on their family, neighbors, and community to help them during their illness, both for comfort and for physical and financial support. Single parents described having support from family and neighbors who took care of their children when they were hospitalized.

Yo soy madre soltera, yo tengo hijos y son menores de edad. No son mayores, y yo no tengo familia. Yo no tengo familia aquí en la casa, hay otras dos personas que viven conmigo, pero no son mis familiares. . . Yo llamé a la secretaria de la iglesia y yo llamé la esposa del diácono. . . Y fue como a las diez de la noche o a las

nueve cuando la secretaria de la iglesia me llamó, no te preocupes, yo ya fui de compra, yo ya llevé la comida a los niños, medicina, jabón, guantes, máscaras en la casa, todo. //I am a single mother, I have children and they are minors. They're not adults, and I don't have a family. I have no family here in the house, there are two other people who live with me, but they are not my relatives. . . I called the church secretary and I called the deacon's wife. . . And it was around ten at night or nine when the church secretary called me, don't worry, I already went shopping, I already brought food to the children, medicine, soap, gloves, masks at home, everything.

Others also discussed feeling supported by the community after neighbors and friends from church brought food to their doors, and receiving support through the state follow-up program.

Many participants described their families urging them to seek care at the hospital, and driving them to the emergency department. Others told us that being able to see their loved ones through video calls helped them get through the rough days in the hospital.

Y la verdad, dentro de todo lo que vivimos con el virus, fue muy bonito sentir el apoyo de parte del médico como también de parte del estado, mandándonos comida y asistiéndonos con lo que necesitábamos. . . A mi esposo también le llamaban seguido y nuestros vecinos y familiares cuando podían dejaban la comida en la puerta. Eso nos ayudó mucho emocionalmente al sentir que no estábamos solos. Siempre había alguien pendiente de nosotros. //And the truth was, with everything that we went through with the virus, it was very nice to feel the support from the doctor as well as from the state, sending us food and assisting us with what we needed. . . My husband was also called often and our neighbors and relatives left food at the door when they could. That helped us a lot emotionally by feeling that we were not alone. There was always someone looking out for us.

Negative Views of Hospitals

Many participants shared that their time at the hospital made them feel emotionally worse. Although almost all participants had positive remarks about the care they received, some described the hospitalization itself as traumatic. Some participants saw other patients die around them. Due to the sedation administered during intubation, some participants described feeling delirious, with recurring nightmares.

Nunca he estado en un manicomio pero me imagino por películas y novelas que he visto. . . Pero. . . oía lloridos de

la gente que se estaba muriendo al otro lado del otro cuarto. Ay, Dios santo. Si uno está mal de la enfermedad, allí se pone peor de oír la gente que se lamenta del dolor y gente que está perdiendo su familia. //I have never been in a mental hospital but I imagine from movies and soap operas that I have seen . . . But . . . I heard cries from the people who were dying across the other room. Oh my god. If somebody is ill with the disease, they get worse here because of hearing people who are crying out in pain and people who are losing their family members.

Some participants discussed the importance of going home to family that could care for them after hospitalization, instead of going to a rehab care facility. One participant noted that he would have “fallen into a depression” if he hadn’t been able to receive his therapies at home. One participant explained that they got very sick with COVID-19 because they had no one at home to take care of them when they were ill.

Entonces, yo les dije a ellos que por favor traten de ayudarme a ver cómo podría que la terapia viniera a casa y que la enfermera lo pudiera ver en casa. Entonces gracias a Dios y gracias a que ellos entendieron y la doctora me dijo que también lo menos que ellos querían era que él cayera en depresión. . . //So I told them to please try to help me see how the therapy could come home and the nurse could see him at home. So thank God and thanks to the fact that they understood and the doctor told me that the last thing they wanted was for him to fall into depression. . .

Due to perceptions that family care is better than hospital care, many participants delayed calling their providers or going to the hospital when their symptoms worsened. A few participants were forced to go to the hospital once they were having trouble breathing, knowing that a lot of people who were hospitalized did not survive.

Impacts of Hospitalization of COVID-19

Participants described their hospitalizations as traumatic and harmful to their mental health. A handful of participants described the traumatic experiences of seeing people die in front of them with a disease that they were also suffering from. One participant described feeling a sense of gratitude for surviving, because they knew that many did not. After leaving the hospital, many participants described ongoing anxieties about using health care services. Many experienced lingering fear of falling ill again, with some describing fear of leaving the house even for basic things.

Abí desde ese momento yo nunca he vuelto a llamar a mi doctora, yo nunca tuve esta cita, yo nunca he vuelto al hospital. Nunca. . . Me he quedado con miedo para entrar otra vez en el hospital. . . de repente me van a operar, me van a poner inyectar, me van a sacar sangre. Yo me quedé muy nerviosa porque me inyectaron mucho, me sacaban sangre, me inyectaban de mi barriga con tantas inyecciones en el hospital cuando yo tuve el COVID. Abí donde yo me quedé un poco traumatizada. //From that moment on I have never called my doctor again, I never went to this appointment, I have never returned to the hospital. Never. . . I’ve been afraid to go to the hospital again. . . suddenly they’re going to operate on me, they’re going to give me an injection, they’re going to draw blood. I was very nervous because they injected me a lot, they took blood, they injected me in my belly with so many injections in the hospital when I had COVID. This is where I became a little traumatized.

Most participants continue to experience pain in their legs, knees, and muscles, even months into their recovery. Many talked about the physical toll that the illness had on their body, including being unable to walk for long periods of time, as well as agitation and difficulty breathing. A few participants described having trouble sleeping, whereas others had issues such as loss of memory, loss of sense of taste, and scars that caused pain when bathing.

A handful of participants described disabling physical issues that prevented them from working. Depression and anxiety also contributed to their inability to work. One participant was not able to afford continued physical therapy sessions; they ultimately were left with limited mobility. A few participants talked about slowly getting back to work after many weeks, and finally being able to work at the same capacity from before they were sick. A final participant was out of work because they were laid off.

Discussion

This study identified the perceived impacts of experiencing clinically significant COVID-19 and deepened our understanding of the cultural context and social support networks in which decisions about care-seeking played out. Our findings demonstrate the strength and resilience derived by participants from social networks, as has been commonly noted in studies with immigrant communities.^{10,18}

These strong social networks may have contributed to the increased impact on the Spanish-speaking communities in the early days of the pandemic.

First, difficulty with social distancing contributed to spreading infections – several of our participants reported having contracted the disease from visiting family members. Second, in some cases, patients and caregivers described delaying hospitalization due to fear of negative health impacts from being away from family. Delays in seeking care have been shown to be associated with more severe COVID-19 on hospitalization and worse overall outcomes.⁹

Our study also highlighted the ways in which participants experienced vulnerabilities due to social determinants of health. These vulnerabilities derived from dependence on low-wage work and a lack of economic safety net; an inability to advocate for taking precautions against COVID-19 at work; and reliance on nonsalaried work leading to the need to continue to work in-person through lockdowns. In addition, housing constituted a vulnerability— people described contracting the virus from neighbors in their buildings, roommates, and members of their households. Even people who lived alone who were receiving distanced care from relatives were sometimes forced into close proximity with others due to their housing situations.

An unexpected theme that emerged was related to the mental health impact of COVID-19. In addition to delaying hospitalization due to a preference for being cared for by family, many experienced emotional distress while hospitalized and away from family, especially in the context of a no-visitors policy. In addition, more than half of our participants described experiencing meaningful negative mental health impacts on their daily lives after they recovered from the disease.

Implications

Our study had several limitations. First, we were working with a specific Spanish-speaking population: immigrants residing in small cities outside of Boston, Massachusetts. Housing conditions, employment patterns, countries of origin, and cultural and historic factors all shape the specific experience of this population, and our findings may not be generalizable to other Spanish-speaking immigrant communities. Second, this qualitative study had a relatively small sample size; nevertheless, we achieved strong thematic saturation. Third, although 57% of people we attempted to contact were women, 85% of our participants were women, suggesting a selection bias. Fourth, we acknowledge that the selection criteria we used of SpO₂ < 95% is a conservative measure for

defining significant disease by itself. Nevertheless, this criteria, selected by clinical members of our team, reflects their clinical judgment that patients who presented in-person during the early phases of the pandemic were ill enough to be experiencing significant distress; the SpO₂ measure is a secondary correlation. Finally, there is a lack of literature discussing the mental health impacts of hospitalization in the general population and on other specific populations, therefore we were unable to make comparisons between COVID-19-related hospitalization versus hospitalization for other causes, or between the experiences of our study population and others. This points to a need for future research exploring these associations.

Health care workers would benefit from understanding the experiences of Spanish-speaking immigrant communities to design culturally appropriate, data-driven interventions. Outreach efforts can be targeted to Spanish-speaking communities in encouraging people to seek care earlier and addressing concerns about hospitalization before it is needed. In particular, the serious mental health implications should be taken into account when weighing the risks and benefits of hospitalization versus home-based care, and in making decisions about visitor policies.

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To see this article online, please go to: <http://jabfm.org/content/00/00/000.full>.

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