ORIGINAL PAPER



Latinx Immigrants' Legal Concerns About SARS-CoV-2 Testing and COVID-19 Diagnosis and Treatment

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Accepted: 1 November 2021 / Published online: 11 January 2022

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Abstract

Immigration concerns can deter immigrants from utilizing healthcare services. We examined Latinx immigrants' immigration concerns related to COVID-19 testing and treatment. A multi-state sample of 336 US Latinx immigrants (documented and undocumented) completed a cross-sectional online survey in Spanish. Factor analysis informed the construction of a COVID-19 Immigration Concerns Scale. Multiple logistic regression was used to examine associations between the scale and indices of perceived immigration risk and healthcare access and utilization. Concerns clustered around two factors: (1) providers' release of information to immigration authorities and drawing government attention; and (2) eligibility for COVID-19 services and the immigration ramifications of using these. The regression equation highlighted strong associations between these and perceived instability of immigration laws and enforcement concerns after controlling for healthcare access and utilization. COVID-19-related immigration concerns were substantial and multifaceted. Perceived instability of laws was strongly related to concerns but remains understudied.

Keywords US immigration law and policy · Latinx immigrants · Infectious disease

Introduction

The Latinx population accounts for 18.4% of the US population and is the largest and fastest growing ethnic minority group in the country. The Latinx population is heterogenous regarding country of birth, level of acculturation, race, and immigration status and trajectories [1]. Approximately 66.5% of Latinx individuals are US born while 33.5% are immigrants [2]. Unfortunately, this sizable segment of the US population has been historically disproportionately impacted by ethnic and racial health disparities [3–5]. US Latinx individuals and immigrants especially, fare worse than non-Latinx white individuals on health outcomes for

medical conditions that are largely determined by social and economic inequality [1, 7].

Research has established the unequivocal influence of social determinants of health such as employment, education, and housing on Latinx health disparities [6, 7]. More recently, immigration is being considered as a social determinant of health as it impacts and is impacted by these conditions. US Latinx immigrants face multiple barriers to accessing health care ranging from lack of health insurance to lack of culturally appropriate care, and limited English-proficiency, health literacy, limited time and transportation [7]. There are approximately 10 million Latinx undocumented individuals in the US and undocumented immigration status, in particular, poses a significant barrier to health-care utilization as undocumented immigrants are excluded from most publicly funded health care programs [8].

In January of 2020, cases of the novel coronavirus causing COVID, a subset of viral respiratory infections ranging from Middle East Respiratory Syndrome (MERS) to Severe Acute Respiratory Syndrome (SARS) were detected in the US [9]. Unfortunately, yet consistent with past research on Latinx health disparities and health care utilization, research indicates that US Latinx are bearing a disproportionate burden of COVID-19 morbidity and mortality relative to



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most other US population groups. Latinx persons in the US are 1.3 times more likely to be infected with SARS CoV-2, 2.3 times more likely to be hospitalized, and 3.1 times more likely to die of COVID-19 than non-Latinx persons. Although information on individuals' national origin is not routinely collected during COVID-19 public health surveillance activities, disparate rates of COVID-19 infection and mortality have been identified in areas with high concentrations of Latinx immigrant residents [10–14]. Presently, several commentaries have pointed to the potential for immigration status to deter immigrants from utilizing services for SARS-CoV-2 testing and COVID-19 treatment [15–18].

Interest in operationalizing immigration status and trajectories as a social determinant of health was fueled by the recent period of hostile immigration political rhetoric experienced during the Trump administration. Specifically, after the 2016 US presidential election, immigrants have faced an increasingly hostile immigration climate [19], which resulted in the passage of restrictive immigration laws and increased partnerships between immigration authorities and law enforcement representatives [20]. Research indicates that restrictive immigration laws and policies and their enforcement exacerbate ethnic health disparities by further limiting US immigrants' health care utilization and directly and indirectly affecting health outcomes in a variety of health conditions [21, 22].

Federal immigration laws such as the passage of 287(g) of the Immigration and Nationality Act (INA), the REAL ID Act, and the Secure Communities Program have negatively impacted the health of immigrants by limiting access to health care services and promoting partnerships between immigration and state and local law enforcement entities to enforce immigration laws [23]. As a result, Latinx immigrants feel targeted by anti-immigration policies [24] and are currently experiencing perceived and actual "threat of deportability." This threat, in turn, is provoking anxiety, which is being felt by entire families, many of which include documented and undocumented members [25, 26]. As many as six in ten Latinx individuals report worrying that a family member will be deported [27].

Past research on the effects of immigration enforcement on Latinx health has centered on understanding changes in health service utilization before and after the passage of restrictive immigration policies [23, 28, 29]. Furthermore, documentation status is a variable that has figured prominently in past research [30, 31] and has been used as a proxy for immigration concerns. Little research has examined the impact of direct immigration concerns stemming from perceptions of immigration law in general. Furthermore, with the exception of a few recent studies [32, 33] most past research has focused on the effect of immigration policies and documentation status on health care seeking in general. As a result, scholars have made a call for the systematic

examination of the impact of immigration policies to understand how these may exacerbate ethnic health disparities [23, 34, 35].

The purpose of the study is to address gaps in prior research by investigating Latinx immigrants' perceptions of the availability of COVID-19-related testing and treatment services and the potential immigration ramifications of utilizing these. Past research on the determinants of Latinx health disparities has pointed to the negative effect of immigration with a focus on immigration status and non-communicable diseases. Our study makes a significant contribution to prior research in that it operationalizes immigration concerns for seeking services for a communicable disease among Latinx immigrants with and without legal documentation status.

Methods

The COVID-19 pandemic emerged during the survey administration phase of an ongoing, multi-state study of the influence of actual and perceived immigration-related laws on Latinx immigrants' willingness to utilize, and actual utilization of, HIV prevention services. Given the potential for immigration concerns to influence Latinx immigrants' use of COVID-19-related health services, we incorporated items about immigration concerns related to COVID-19 testing, diagnosis and treatment into the existing survey.

Participants

Participants were adult, Spanish speaking, non-citizen Latinx immigrants (documented and undocumented) who had been living in the US for at least 6 months. Because a central outcome for the larger study was HIV testing history and current HIV testing habits, participants reported that they were HIV-negative or did not know their HIV-status and had had unprotected anal or vaginal sex in the previous 12 months.

Procedure

Cross-sectional data for the current study were collected between 7/15/20 and 10/9/20 from Latinx immigrants living in three US cities—Chicago, IL, Los Angeles, CA, and Phoenix, AZ. Participants were recruited through word-of-mouth and on-line distribution of the study flyer. Our goal was to recruit a heterogeneous sample of Latinx immigrants that resembled the respective city's Latinx immigrant population in terms of age, immigration status, self-identified gender, and country of birth. As a result, we distributed flyers in community sectors where diverse Latinx immigrants lived and worked and community-based organizations that



served diverse Latinx immigrant populations. Eligible participants were sent a survey link and an informational letter via cellular phone text or email. In cases where technology was a barrier to participation, interviewers administered the survey via telephone. To assuage concerns about confidentiality, participants' names were not collected. Participants were also told that they could further protect their anonymity by creating an email account specifically for the study. IP addresses were deleted from the survey database. The survey was administered through the Qualtrics survey platform and took approximately one hour to complete. After completing the survey, participants watched a debriefing video and were given information on relevant local resources. Participants then received a code for a \$50 online gift card. All materials were in Spanish. All procedures were approved by the Internal Review Board at the second author's institution.

Measures

Sociodemographic Variables

Sociodemographic variables assessed included participants' age, self-identified gender, country of origin, language preference, and immigration documentation status ('permanent resident,' 'visa holder,' 'immigrant with a work permit,' 'undocumented immigrant' or 'other').

Health Insurance, Healthcare Utilization, and Immigration-Related Healthcare Barriers

Health insurance status was assessed by asking participants whether they had health insurance. Healthcare utilization was assessed by asking participants whether they had received medical care in the US in the previous 12 months. To account for those who didn't seek care in the last year because they didn't need it, we asked also whether they had needed healthcare and didn't receive it in the last year. In addition, participants were asked whether they had received care at a hospital emergency department. To assess immigration related-barriers to health care utilization, participants were asked to respond to five items assessing barriers. These ranged from concerns about eligibility for services based on documentation status to anticipating that one would be denied services because one was an immigrant ($\alpha = 0.84$). The response options for health insurance, healthcare utilization and immigration-related barriers were dichotomous (1 = 'yes' and 0 = 'no').

COVID-19 Immigration Concerns

Based on formative work in the parent study, we developed 25 items to assess COVID-19-related immigration concerns. Concerns ranged from healthcare providers reporting

immigrants' test results to immigration authorities to immigrants being designated as financially dependent on government resources if they utilized publicly funded testing or treatment services. Participants indicated responses on a four-point Likert-type scale ranging from 1 = 'strongly disagree' to 4 = 'strongly agree.'

Perceived Instability of Immigration Laws

Based on the parent study preliminary findings, we developed four items to assess participants' perceptions of the instability of immigration-related laws during the COVID-19 pandemic. Sample items included 'Things are happening so quickly with the COVID-19 pandemic, anything related to immigration requirements or consequences of COVID-19 may change tomorrow' and 'Even if they tell you it's not a problem, medical clinics do not really know how using their services for testing or treatment of COVID-19 will affect your immigration prospects.' Responses were indicated on a four-point Likert-type scale ranging from 1 = 'strongly disagree' to 4 = 'strongly agree'; $\alpha = 0.84$.

Immigration Enforcement Concerns, Deportation Experiences, and Perceived Likelihood of Deportation

Immigration enforcement concerns were assessed with a 7-item Fear of Deportation Scale. Participants were asked whether because of immigration concerns they avoided activities ranging from walking in the streets to asking for help from government agencies. Response options were dichotomous (1 = 'yes' and 0 = 'no'); α = 0.89. Deportation experiences were assessed with four items adapted from the Hispanic Stress Inventory (11). The items asked whether participants had been questioned by immigration authorities, detained by immigration authorities, had been deported, had a family member or close friend be deported, or feared deportation. Response options were dichotomous (1 = 'yes' and 0 = 'no'). Deportation experiences were not aggregated into a scale. A single item assessed perceptions of the probability of deportation. Response options ranged from 1 = 'not at all likely' to 4 = 'very likely'.

Perceived Discrimination

Perceived discrimination was assessed with a 9-item Everyday Discrimination Scale. Participants indicated the frequency with which they experienced discrimination in their daily lives. Items ranged from being treated with less courtesy than others to being threatened or harassed. Response options were 'every day,' 'at least once a week,' 'a few times a month,' 'a few times a year,' 'less than once a year,' and 'never'; $\alpha = 0.90$.



Analysis

Statistical Package for the Social Sciences (SPSS) quantitative data analysis software version 27 was used for all analyses (13). Summary statistics and item frequencies were generated. Documentation status was dichotomized (0='undocumented' and 1='documented'). Missing data were imputed using the multiple imputation module of IBM SPSS Statistics, version 27. Inspection of missing data patterns indicated a range of missing data from 0.3 to 22.0%. Diagnostic plots were constructed and examined. Comparisons of missing data patterns by demographic characteristics did not reveal significant associations. A total of 40 imputed data sets were computed in 840 iterations. The estimates from the imputed data sets were combined for the analyses [36]. The reliability of all scales was determined by computing Cronbach's alpha and Kuder–Richardson 20.

For the purposes of testing bivariate and multivariate associations with aggregated items assessing COVID-19 immigration concerns, we conducted two exploratory factor analyses (FA). The first FA consisted of an unrotated FA on the 25 items assessing COVID-19 immigration concerns. We examined Eigenvalues and the scree-plot. We then conducted a second rotated exploratory FA specifying the number of factors yielded in the first FA to select final scale items based on factor interpretability and eigenvalues. We proceeded to aggregate the COVID-19 items that were selected for inclusion into a scale. Abbreviated results of the FA are presented in the results section below.

A linear stepwise blocked regression analysis was conducted to determine associations between the COVID-19 Immigration Concerns Scale and indices of actual and perceived immigration risk and health care utilization. We operationalized immigration risk as undocumented status, greater perceived discrimination, greater perceived instability of immigration laws, and greater immigration enforcement concerns. Our aim was to investigate whether immigration risk variables emerged as significantly associated with COVID-19 concerns and the magnitude of their association after controlling for health care utilization and barriers to health care utilization and hence, equating participants on these variables. Our goal was to understand whether variables assessing immigration risk would predict variability of responses on the COVID-19 Immigration Concerns Scale above and beyond indices of health care utilization and barriers to utilization. In the first step of the equation, the variables 'healthcare utilization' and 'immigration-related healthcare barriers' were entered using the enter procedure. In the second step, the variables 'undocumented status', 'perceived discrimination', 'perceived instability of immigration laws' and 'immigration enforcement concerns' were included using the enter procedure.



A sample of 336 adult Latinx immigrants completed the study survey. An additional 43 eligible persons did not return surveys after being sent survey links. The mean age of participants was 39.7 (SD=8.90; range 18–77 years); half were 40 years old or younger. Regarding gender, 62.5% of participants self-identified as female. Most participants were born in Mexico (86.6%). Over three-quarters (78.9%) reported speaking Spanish all or most of the time and 64.3% reported being undocumented. Table 1 presents other demographic variables.

Health Insurance, Healthcare Utilization, and Immigration-Related Healthcare Barriers

Just under one-quarter of participants (23.9%) reported that they had health insurance. Half (49.7%) reported that they had received medical care in the US in previous 12 months. Of those who had received medical care in the US in previous 12 months, 25.6% sought care at a hospital emergency department. Over one-third (35%) reported that in the previous 12 months, they had been afraid to seek medical care because they were an immigrant. Twenty percent of participants reported that in the previous 12 months, they had missed taking a loved one such as a son or daughter to the doctor because they were worried about immigration problems.

Deportation Experiences, Immigration Enforcement Concerns, Likelihood of Deportation, and Perceived Discrimination

Although only 4.4% of participants had ever been deported, 38.4% reported that a close family member or friend was deported, and over half (59.5%) reported being afraid of being deported. Over two-thirds of participants (69.4%) believed that it was likely that an immigrant in the US without proper documents would be deported and 43.8% reported that they avoided asking for help from government agencies because they had concerns about being deported. Half of the participants reported that they experienced some form of discrimination at least once in the last year.

Immigration Concerns Related to COVID-19 Testing, Diagnosis and Treatment

Participants across the sample endorsed deleterious and often inaccurate statements about immigrants' restricted access to COVID-19-related health services and the negative immigration ramifications of being diagnosed with and treated for COVID-19. The COVID-19 Immigration



Table 1 Demographic characteristics (N = 336)

	f	%
Gender		
Male	124	36.9
Female	210	62.5
Transgender	1	0.3
Other	1	0.3
Age		
18–24	18	5.4
25–44	221	65.8
45–54	84	25
55–64	9	2.7
65 and over	4	1.2
Marital status		
Married	184	54.7
Long term relationship but not married	106	31.5
Single	46.3	13.8
Education		
High school or less	248	73.7
Technical degree	29	8.7
Some college or college graduate	58	17.4
Monthly income		
\$0–999	164	48.7
\$1000–1999	118	35.2
\$2000–4999	52	15.5
\$5000 or more	2	0.6
Health insurance		
No	256	76
Yes	80	24
Immigration status		
Undocumented	216	64.3
Documented	120	35.6
Country of birth		
Cuba	2	0.5
El Salvador	8	2.3
Ecuador	3	0.8
Guatemala	14	4.1
Honduras	4	1.1
Mexico	291	86.6
Nicaragua	1	0.2
Other	13	3.8
Preferred language		
English always or most of the time	9	2
Both English and Spanish equally	60	17.8
Spanish always or most of the time	265	78.8
Another language	2	0.5

Numbers have been rounded to the nearest 100th

Concerns Scale items and their factor loadings are presented in Table 1. Results from analyses of the original 25 COVID-19 immigration concerns items are presented elsewhere (14).

Perceived Instability of Immigration Laws

Participants were concerned about the instability of immigration-related laws and their access to accurate information about the immigration ramifications of utilizing healthcare services. Well over half of the participants (61.2%) agreed with the statement 'Things are happening so quickly with the COVID-19 pandemic, anything related to immigration requirements or consequences of COVID-19 may change tomorrow' and 53.5% agreed with the statement 'Even if providers at clinics or doctors' offices tell you that seeking help for COVID-19 will not affect your immigration status or chances, you can't be sure'.

Factor Analysis, Scale Construction, and Bivariate and Multivariate Associations

As mentioned, for the purposes of testing associations with aggregated items assessing COVID-19 immigration concerns, two exploratory factor analyses were conducted to select items to aggregate into a scale. The eigenvalues and scree plot from the first unrotated FA indicated a two-factor scale. We proceeded to delete items with small loadings or double loadings. We computed a second exploratory factor analysis (FA) with the remaining items, specifying two factors. We employed varimax rotation which yielded a 12-item COVID-19 Immigration Concerns Scale; $\alpha = 0.91$. The 12 scale items and their factor loadings and reliability indices are presented in Table 2. We named Factor 1 'Release of COVID-19-related Information and Unwanted Government Attention' (7 items; $\alpha = 0.91$) and Factor 2 'Eligibility for COVID-19 Health Services and Financial Concerns' (5 items; $\alpha = 0.83$).

Bivariate correlations are presented in Table 3. The 12-item COVID-19 Immigration Concerns scale was significantly associated with perceived instability of immigration laws (r=0.52, p<0.01); immigration-related healthcare barriers (r=0.34, p<0.01); and healthcare utilization in the previous 12 months (r=-0.21, p<0.01).

Regression Analysis

The variables in the first step of the regression equation (i.e., healthcare utilization in the last 12 months and immigration-related healthcare barriers) accounted for 10% (p < 0.01) of the variance in responses to the 12-item COVID-19 Immigration Concerns Scale and both were significantly related (p < 0.01). In the second block, immigration-related healthcare barriers was no longer significant, while utilizing healthcare in the last 12 months remained significant (B = -0.13, p < 0.05). Perceived discrimination (B = 0.19, p < 0.01), perceived instability of immigration laws (B = 0.42, p < 0.01), and immigration



Table 2 COVID-19 immigration law concerns scale items, factor loadings, and reliability

	1	2	α
Factor 1 (7 items)			
Immigrants COVID-19 test results are reported to immigration authorities	0.69	0.34	0.91
It is better for immigrants to avoid being tested for COVID-19 because their medical records are available to immigration authorities	0.79	0.23	
Doctors send a report to immigration authorities whenever an immigrant seeks medical care for COVID-19	0.83	0.29	
Doctors must inform immigration officials if they believe that an immigrant has an infectious condition like COVID-19	0.63	0.32	
Undocumented immigrants might be identified by immigration officials if they seek medical care for COVID-19	0.82	0.26	
If an immigrant needs to be tested for COVID-19 it is best not to provide personal information because it will draw attention to his or her immigration status	0.73	0.19	
To avoid government attention, it is better for immigrants to not be tested or treated for COVID-19	0.78	0.24	
Factor 2 (5 items)			
If an immigrant uses public medical services because they think they may have COVID-19, the government may make them pay back the cost of their treatment	0.72	0.22	0.83
Immigrants who hope to regularize their immigration status should not go to publicly funded clinics for COVID-19 testing or treatment because immigration officials will think they cannot financially support themselves'	0.77	0.23	
An immigrant who has used low cost, public medical services for COVID-19 may not be allowed to renew or advance their immigration status based on financial need'	0.81	0.22	
Immigrants must have proof that they are legal residents to be eligible for low cost or free medical treatment for COVID-19	0.66	0.41	
Most medical providers and clinics require patients to present a valid state ID to receive services for COVID-19. If you don't have a valid ID, they will not treat you	0.64	0.24	

Table 3 Bivariate correlations (N = 336)

	1	2	3	4	5	6	7	8	9	10
1. Immigration concerns for COVID-19 Scale	_	-0.20**	0.22**	0.16*	0.01	0.02	0.17**	0.37**	0.36**	0.53**
2. Health care utilization in the last 12 months		_	-0.04	-0.06	-0.09	-0.03	0.04	0.09	-0.09	-0.04
3. Immigration-related healthcare seeking barriers			_	-0.01	0.07	-0.01	0.03	0.28**	0.25**	0.13*
4. Undocumented status				_	-0.03	-0.09	-0.06	0.04	-0.13*	0.16*
5. Likelihood of deportation					_	0.05	0.13*	-0.01	0.22*	0.05
6. Ever been deported						_	0.15**	-0.01	-0.01	0.00
7. Close friend or family deported							_	0.18**	0.32**	0.11
8. Perceived discrimination								_	0.39**	0.22**
9. Immigration enforcement concerns									_	0.20**
10. Perceived instability of immigration laws										-

Significant relationships are bolded

Table 4 Factors associated with COVID-19 Immigration Law Concerns Scale (N = 336)

Variable	В	SE	В	95% CI	t	p
Healthcare utilization last 12 months	-0.22	0.07	-0.15	-0.35, -0.09	-3.24	0.01
Immigration-related healthcare seeking barriers	0.38	0.22	0.08	-0.04, 0.81	1.78	0.07
Perceived discrimination	0.15	0.04	0.19	0.07, 0.24	3.59	0.001
Perceived instability of immigration laws	0.33	0.03	0.44	0.26, 0.40	9.23	0.001
Immigration enforcement concerns	0.46	0.15	0.16	0.16, 0.77	3.05	0.01

enforcement concerns (B = 0.18, p < 0.01) emerged as positively related to responses on the COVID-19 Immigration Concerns Scale and accounted for an additional

21% of the variance (p < 0.01). Undocumented status did not emerge as significantly associated. Results of the last step of the regression are presented in Table 4.



^{*=&}lt;0.05; **p<0.01

Discussion

Participants' COVI-19 immigration concerns clustered around two factors. The first factor related to concerns about information being released to immigration authorities and drawing unwanted government attention. These concerns are largely unfounded, yet they threaten to drive a wedge of distrust between patients and medical providers at a time when the strength of these relationships is of utmost importance. Immigrants should be provided with information about their rights to privacy and confidentiality and told explicitly that personal information provided in healthcare settings will not be transmitted to immigration authorities. Further, immigration law and policy makers should ensure that requests for immigrants' medical information in connection with immigration petitions or proceedings are narrowly tailored to serve clear public and individual health purposes.

The second factor related to concerns about eligibility for COVID-19 health services and the financial ramifications of using these. These concerns are likely influenced by an amended U.S. Citizenship and Immigration Services (USCIS) rule, the 'public charge rule', that expanded penalties for some immigrant groups' use of public benefits [37]. Even though the incoming US administration rescinded the rule, changes were widely publicized reflecting a longstanding US policy that immigrants should not become 'public charges' or reliant on US resources for subsistence [38]. There was widespread misunderstanding of the amended rule [39-41], and several commentators noted the potential for the rule to deter healthcare utilization [15, 18, 39]. To address remaining confusion about the law and subsequent reluctance to use necessary public benefits, accurate, plain language information about the Public Charge Rule should be widely disseminated through trusted information sources. Further, policy makers should consider whether attaching immigration consequences to the utilization of any healthcare program is in the best interest of the nation. Deterred healthcare utilization can result in more serious and more costly illness and unnecessary morbidity and mortality. Immigrants are strong contributors to the US workforce and economy [42-44].

Three additional findings are particularly noteworthy. Although immigration-related barriers to healthcare utilization, a factor commonly considered in research on immigrant health, was initially associated with COVID-19 immigration concerns, the association was no longer significant when variables related to actual and perceived immigration risk were included in the analysis. Yet little is known about how immigrants assess immigration risk related to healthcare utilization or the factors that

contribute to this assessment. Similarly, while perceptions of the instability of immigration-related laws accounted for 16% of the variance of the COVID-19 Immigration Concerns Scale, researchers have given little attention to this topic. More research on both topics is needed.

Finally, immigration documentation status was not significantly associated with COVID-19 immigration-related testing and treatment concerns. While immigrant health research and interventions often focus on undocumented immigrants, this result underscores the need to consider the concerns of all immigrants regardless of documentation status.

Limitations

Study findings are based on self-report from a convenience sample of Latinx immigrants, thus the generalizability of our findings is limited. Because sampling for persons who had been diagnosed with COVID-19 was not feasible within the context of the parent study, data to examine associations between beliefs and behaviors were not gathered. Further study is needed to better understand the link between immigration beliefs and healthcare behaviors, whether the care utilized is for outbreaks of infectious disease or for prevention of routine contributors to morbidity and premature mortality. Although documentation status did not emerge as significantly associated with COVID-19 immigration concerns, we wish to highlight that it may have been due to lack of power to detect an association or measurement error as documentation status is a highly sensitive question. We attempted to create an environment where participants would feel protected by leveraging the tremendous trust garnered by our community partners. The majority of participants reported that they were undocumented suggesting the reluctance to disclose undocumented status was not a significant contributor to findings.

Conclusion

The COVID-19 Immigration Concerns Scale highlights areas where laws, policies, and perceptions of laws and policies may deter individuals from following critical public health recommendations. Misinformation and lack of reliable information may exacerbate concerns. Insofar as restrictive legislation and associated legislative rhetoric engender fear and confusion, they undermine public health efforts.

Acknowledgements We would like to acknowledge the contribution of the following Proyecto Luz 2.0 research team members during COVID-19 survey item refinement, item translation, survey programming, and data collection: Ruzanna Aleksanyan, MS, Joanna L. Barreras, PhD, MSW, Nora Bouacha, MPP, Ronald A Brooks, PhD, Andrea



L. Dakin, PhD, Gerardo Cruz, MPH, Samantha Garza, MS, Amanda Landrian Gonzalez, MPH, Gabriela E. Lazalde, MPH, Sara LeGrand, PhD, Celina Lopez, Elizabeth Ortiz de Valdez, MD, Juan Reyes, Dulce María Ruelas, DrPH, MPH, Beth Stringfield, and Silvia Valadez-Tapia, MA. This research was supported by the National Institute on Minority Health and Health Disparities under Grant 1R01MD011573 and the National Institute of Mental Health under Grant P30MH052776.

Author Contributions All authors have reviewed the submitted manuscript and approve the manuscript for submission.

Declarations

Conflict of interest No potential conflict of interests were reported by the authors.

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