

UCLA

UCLA Previously Published Works

Title

Everyday Violence: Immigration Enforcement, COVID-19, and Depression among Undocumented Young Adults in California.

Permalink

<https://escholarship.org/uc/item/3163g0zx>

Journal

Ethnicity & disease, 34(2)

Authors

Nwankwo, Ezinne

Choi, Hye

Li, Steve

et al.

Publication Date

2024-02-01

DOI

10.18865/ed.34.2.84

Peer reviewed

EVERYDAY VIOLENCE: IMMIGRATION ENFORCEMENT, COVID-19, AND DEPRESSION AMONG UNDOCUMENTED YOUNG ADULTS IN CALIFORNIA

Ezinne Nwankwo, PhD, MPH^{1,2}; Hye Young Choi, MPH³; Steve Li, RN, MSN⁴; May Sudhinaraset, PhD²

Background: The immigration enforcement system has significant effects on the health of immigrants, their families, and society. Exposure to the immigration enforcement system is linked to adverse mental health outcomes, which may have been exacerbated by sustained immigration enforcement activities during the COVID-19 pandemic.

Objectives: This study was conducted to investigate the association between exposure to immigration enforcement and the mental health of undocumented young adults in California during the COVID-19 pandemic.

Methods: Data are from the COVID-19 BRAVE (Building Community Raising All Immigrant Voices for Health Equity) Study, a community-engaged cross-sectional survey of the impacts of the COVID-19 pandemic on undocumented immigrants in California. A total of 366 undocumented immigrants between 18 and 39 years of age completed the online survey, which was conducted between September 2020 and February 2021. Multivariable logistic regression models were fit to examine the association between immigration enforcement exposure and depression.

Results: Almost all participants (91.4%) disclosed exposure to the immigration enforcement system, with most reporting an average of 3.52 (SD=2.06) experiences. Multivariate analyses revealed that an increase in the immigration enforcement exposure score was significantly associated with higher odds of depression (adjusted odds ratio [aOR]=1.24; 95% confidence interval [CI]: 1.10, 1.40), and women were 92% more likely to report depression than were men (aOR=1.92; 95% CI: 1.12, 3.31). Those who reported deportation fears were significantly more likely to be depressed (aOR=1.24; 95% CI: 1.10, 1.40).

Conclusions: Researchers should consider the mental health implications of a punitive immigration enforcement system, and policymakers should examine the impacts of immigration policies on

local communities. *Ethn Dis.* 2024;34(2):84–92; doi:10.18865/ed.34.2.84

Keywords: COVID-19; Coronavirus; Immigration Enforcement; Undocumented Immigrants; Depression

¹ USC Equity Research Institute, Los Angeles, CA

² Department of Community Health Sciences, UCLA Fielding School of Public Health, Los Angeles, CA

³ Yale School of Medicine, Yale University, New Haven, CT

⁴ Yale School of Nursing, Yale University, New Haven, CT

Address correspondence to Ezinne Nwankwo, PhD, MPH; USC Equity Research Institute, Los Angeles, CA. enwankwo@usc.edu

and health, there is little information about its association with undocumented immigrants' mental health during the COVID-19 pandemic.

Undocumented Immigrants

About 11 million immigrants are undocumented or reside in the United States without authorization.⁸ National estimates suggest that about a quarter of the undocumented immigrant population lives in California,⁹ the largest proportion of any state. Undocumented immigrants constitute close to 20% of California's immigrant population and 5.6% of the total state population.¹⁰ Most undocumented immigrants in California are from Latin America, but an increasing portion are from Asia.⁹

Although California has espoused inclusive immigrant policies in recent years, undocumented immigrants' everyday experiences have been mixed.¹¹ California prohibits state and local law enforcement agencies from apprehending, detaining, or arresting individuals for immigration enforcement actions, but extant reports suggest that Immigration and Customs Enforcement (ICE) continues to operate in some local jurisdictions.¹² Even as the nation faced elevated numbers of COVID-19 cases and deaths, efforts to detain undocumented immigrants persisted.¹³ Uncertainty about the pandemic, immigration enforcement-related fears, and heightened collective stress during this period may

INTRODUCTION

Immigration enforcement including the policies and practices that govern the surveillance, apprehension, detention, and deportation of immigrants, particularly those who are undocumented, has significant implications for individual health and the well-being of families and society. Growing research links encounters with the immigration enforcement system with deportation fears and anxiety,¹ discrimination and racial profiling,^{2,3} economic and material hardship,⁴⁻⁶ reduced use of health and social services,^{2,7} and isolation and distress,² all of which contribute to poor mental health. Although immigration enforcement has consequential impacts on immigrants' everyday lives

have exacerbated poor mental health. Undocumented immigrants' unauthorized status and inability to travel abroad to attend the funerals of family members who died of COVID-19 may have resulted in added risk for poor mental health.¹⁴

Immigration Enforcement and Mental Health

Research on immigration enforcement and mental health has focused on two federal initiatives, the 287(g) and Secure Communities programs, which authorize ICE activities within state and local jurisdictions. The results of these studies generally suggest that immigration enforcement policies increase anxiety and stress, which impacts mental health.^{2,6} Escalating ICE arrests in states with 287(g) and Secure Communities programs have had impacts on mental health, including increased mental distress and poor mental health days.¹⁵ Although immigration enforcement policies sanction a wide range of enforcement strategies,¹⁶ undocumented immigrants may experience implementation of these strategies in various ways, each contributing to poor mental health. Fear of deportation in particular resulting from a restrictive local immigration climate is associated with stress, anxiety, and depression.¹⁷⁻¹⁹ However, to date, few researchers have examined the multiple ways immigration enforcement may directly and indirectly affect the lives of undocumented immigrants and contribute to their poor mental health.

Everyday violence underscores the pervasiveness of immigration enforcement in undocumented immigrants' daily lives.^{20,21} Immigration enforcement policies and actions create a climate of fear that constrains everyday activities. Routine behaviors such as visiting friends and family, driving, attending public events, and using public services become risky and can trigger harmful stress-related responses, as any encounter with immigration enforcement officials

increases the risk of apprehension, detention, and deportation for undocumented immigrants.^{2,19,20,22} Chronic exposure to stress is associated with poor physical and mental health and can have lasting consequences.^{22,23}

Immigration enforcement can also alter health-related behaviors.⁶ Undocumented immigrants are more likely to forego health care and social services for themselves or a qualifying citizen family member to evade possible contact with immigration enforcement officials.²² Such coping mechanisms, especially during a pandemic, may place undocumented immigrants at increased risk of poor mental health.

Encounters with immigration enforcement officials are potentially even more consequential during public health emergencies, when racism and xenophobia may lead to associating disease with a particular group.^{24,25} Anti-Asian racism, including hate speech, hate crimes, discrimination, and physical violence, increased during the pandemic and were largely fueled by stereotypes linking COVID-19 to Asian communities.^{24,25} Because race may be used as a proxy for immigration status, Asians and Latinx people may have been especially vulnerable to immigration enforcement actions. The scapegoating of Asian and Latinx communities during the public health crisis likely exacerbated the pandemic's adverse effects and may have resulted in poor mental health.

This study was conducted to examine the association between immigration enforcement exposure and depression among undocumented young adults in California during a critical period. Unlike previous studies that have focused on one or more immigration enforcement policies or perceptions of those policies,^{1,2,4-6} we aggregated indirect and direct exposures to specific immigration enforcement practices to capture the myriad ways undocumented immigrants may encounter the immigration enforcement system. As a result, this study was centered on the

experiences, encounters, and fears that result from immigration enforcement policies.

METHODS

This cross-sectional study included data from the COVID-19 BRAVE (Building Community Raising All Immigrant Voices for Health Equity) Study, a community-engaged survey of the social, economic, and health impacts of the COVID-19 pandemic on undocumented immigrants in California. Data were collected via Qualtrics, an online survey platform, between September 2020 and February 2021. The survey was developed in collaboration with a community advisory board. School and community-based immigrant-serving organizations and partners facilitated recruitment via listservs, social media postings, and flyers. The survey was by invitation only and was password protected to ensure valid responses from verifiable undocumented participants. Each organization received a unique password that they shared with interested participants. Participants were emailed a unique link to access the survey after they provided the organization password. Survey eligibility included reporting (1) undocumented status, (2) Asian and/or Latinx race, (3) 18 to 39 years of age, (4) California resident at the time of the survey, and (5) ability to take the 15-minute online survey in English or Spanish. Eligible participants provided informed consent and received a link and credentials to complete the password-protected survey and a \$10 gift card for their time.

Sample

Of the 438 participants who received the survey link, 366 completed the survey. We used validation checks to exclude 24 respondents who provided incongruent responses to immigration-

related questions. These individuals either reported being born in the United States or disclosed having Deferred Action for Childhood Arrivals (DACA) status, although their responses to 1 or more DACA requirements (ie, unexpired lawful immigration as of June 15, 2012; living in the United States for <5 years prior to June 15, 2012; having been convicted of a felony or significant misdemeanor) would have made them ineligible for the program. This approach has been used in previous research to validate study samples.²⁶

We also excluded individuals (n=16) who did not complete 1 or more questions that were the focus of this study and did not impute because this information was not missing at random. No significant differences in depression scores were found between the missing and final samples ($P<.05$). The final analytic sample includes 326 participants.

Measures

Depression

Depression was assessed with the 10-item Center for Epidemiological Studies Depression Scale (CES-D), a screening tool for evaluating depressive symptoms in the general population.²⁷ The self-reported questions have been validated for use in community-based samples, including among immigrant populations.^{28,29} Respondents were asked how often in the past week they felt symptoms of depression (ie, bothered by things that do not usually bother me, trouble concentrating, felt depressed, felt that everything was an effort, felt hopeful about the future [reverse coded], felt fearful, restless sleep, felt happy [reverse coded], felt lonely, and could not get going), and responses were coded as 0=rarely or none of the time (<1 day), 1=some or a little of the time (1-2 days), 2=occasionally or a moderate amount of time (3-4 days), and 3=all of the

time (5-7 days). Possible CES-D scores range from 0 to 30, with higher scores indicating greater depressive symptoms. We followed published guidelines for coding, which included summing the scores of participants with ≤ 2 missing items.²⁷ In our sample, the Cronbach's alpha value for CES-D was .85. Scores ranged from 0 to 24 ($SD=5.65$), and scores ≥ 10 indicated clinically significant depression.²⁷

Immigration Enforcement Exposure

The immigration enforcement score was based on 11 questions about respondents' experiences with immigration enforcement and their fears about such encounters. The items were developed by the Research on Immigrant Health and State Policy (RIGHTS) Study, a project designed to understand the social, economic, and health care experiences of Latino and Asian immigrants who live in California.³⁰ Respondents were asked whether (1) there was ever a time they decided not to apply for one or more noncash government benefits because of worries it would disqualify them or a family member from obtaining a green card or becoming a US citizen; (2) they or someone they knew experienced an immigration raid at work or at home; (3) someone they knew had ever been detained or deported by immigration authorities; (4) they had ever faced deportation proceedings; (5) there was ever a time they decided not to leave their house or stayed away from certain areas to avoid the police or immigration authorities; (6) there was ever a time they decided to avoid traveling by car, bus, train, or plane to avoid internal checkpoints or TSA authorities; (7) they had ever been watched by a law enforcement officer on the street or a public place; (8) they had ever been stopped for no good reason by law enforcement; (9) they had ever been asked to show proof of their citizenship or legal status by a police officer or other law enforcement authority; (10) they had seen

immigration authorities in their neighborhood, and (11) they fear getting deported. Questions 1 through 10 were reported as no (0) or yes (1); question 11 was reported as "all of the time," "most of the time," "some of the time," and "no, I do not," and responses were dichotomized as 0 (no, I do not) and 1 (all/most/some of the time). Responses coded as 1 were summed to create an immigration enforcement score, with higher values denoting more exposure to the immigration enforcement system. This score ranged from 0 to 9 (mean=3.52, $SD=2.06$).

Covariates

Additional covariates included sex (female and male), race (Latino or Asian), DACA status (DACA or no DACA [those whose applications were pending renewal or denied or those who never applied for the program]), age (18-24, 25-30, or ≥ 31 years), and education (high school or less, some college/community college, and college or graduate school). Employment status, school enrollment, and speaking English at home were also reported and included as dichotomized yes/no responses. Respondents also disclosed their health insurance status. Those who reported having a county health plan, Medi-Cal, school health plan, private/employee health plan, or other health insurance were coded as having health insurance; others were considered uninsured. Respondents (N=298) who indicated an affirmative response to immigration enforcement items 5 through 10 were asked, "since March [2020] has this increased (3), stayed the same (2), or decreased (1)?" after each question. Individual responses were averaged across the 6 follow-up questions, and a group mean was determined. Individual mean responses were then coded as above (1) or below (0) the mean (2.05, $SD=0.51$).

Analyses

We examined the distribution of the sample before assessing differences on study measures with a *t* test and a chi-square test. With multivariate logistic regression models, we investigated the association between the immigration enforcement score and depression, adjusting for covariates. To assess the robustness of the immigration enforcement score, we examined the mean, median, and a dichotomized measure of the score (0 versus 1+ enforcement encounters) and found similar overall patterns (not shown), net of covariates. We also assessed whether results depended on race or DACA status but found no significant differences in depression based on these measures (not shown). In sensitivity analyses with the full sample and a sample subset (respondents who disclosed an immigration enforcement exposure, N=298), we did not find significant differences in depression when comparing those who reported that on average immigration enforcement increased and respondents who indicated that immigration enforcement stayed the same, decreased, or did not occur following March 2020 (not shown).

All analyses were performed with Stata/SE version 15.1, with statistical significance set at $P < .05$. The Institutional Review Board at the University of California, Los Angeles approved this study, and all procedures were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all participants included in the study.

RESULTS

Descriptive Statistics

Table 1 lists the demographic characteristics of the study sample (N=326). More women (75.0%) than men (25.2%) were included in this

study, and Latino participants made up 85% of the sample. Most respondents (64.1%) reported having DACA. The mean age was 22.63 (SD=3.9) years, and about 73.6% of participants were between 18 and 24 years old. The majority of respondents had completed some college or community college (42.3%); 34.1% reported completing college or graduate school, and 23.6% had finished high school or less. About half (49.1%) of the participants were employed. Most participants were enrolled in school (88.0%), spoke English at home (85.3%), and had health insurance (78.2%). The mean CES-D score was 11.75 (SD=5.65), with more than half (62.0%) of the participants reporting clinically significant distress.

Almost all participants (91.4%) disclosed an immigration enforcement-related exposure, with most reporting an average of 3.52 (SD=2.06) direct or indirect experiences (Table 2). Among those who were exposed to the immigration enforcement system, 27.8% indicated that on average such experiences had increased since March 2020. Over half (52.5%) of study participants reported that there was a time when they did not apply for noncash benefits because of worries that application would disqualify them or a family member from obtaining a green card or becoming a US citizen. About 15.6% indicated that they or someone they knew had experienced an immigration raid. Close to half (46.6%) reported knowing someone who had been detained or deported, although <1% had faced deportation proceedings themselves. About 37.1% reported deportation fears, with a higher proportion (75.5%) disclosing that they stayed away from certain areas or failed to leave their home to avoid the police or immigration authorities. Many respondents (68.7%) indicated that they avoided traveling to avoid encounters with immigration authorities. Close to a quarter (21.8%) reported that they had been watched by law enforcement

Table 1. Characteristics of the study participants, N=326

Variable ^a	n (%)
Depression	
CES-D score	11.75 (5.65)
Depressive distress	
Not clinically significant	124 (38.0)
Clinically significant	202 (62.0)
Sociodemographics	
Gender	
Female	244 (74.9)
Male	82 (25.2)
Race/ethnicity	
Latino	277 (85.0)
Asian/Pacific Islander	49 (15.0)
DACA status	
No DACA	117 (35.9)
DACA	209 (64.1)
Age (years), mean (SD)	22.63 (4)
18-24	240 (73.6)
25-30	72 (22.1)
31+	14 (4.3)
Education	
High school or less	77 (23.6)
Some college/community college	138 (42.3)
College or graduate school	111 (34.1)
Employed	
No	166 (50.9)
Yes	160 (49.1)
Enrolled in school	
No	40 (12.3)
Yes	286 (87.7)
English spoken at home	
No	48 (14.7)
Yes	278 (85.3)
Health insurance	
No	71 (21.8)
Yes	255 (78.2)

^a CES-D, Center for Epidemiological Studies Depression Scale; DACA, Deferred Action for Childhood Arrivals

on the street, although fewer (9.0%) had been stopped by law enforcement for no good reason. About 4% had been asked to show proof of citizenship or legal status, and close to a quarter (20.6%) reported seeing immigration authorities in their neighborhood.

Multivariate Results

Overall, a 1 unit increase in immigration enforcement encounters was

Table 2. Exposure of participants to immigration enforcement, N=326

Variable	n (%)
Immigration enforcement score, mean (SD)	3.52 (2.06)
Reports a time when they did not apply for 1 or more noncash government benefits because of worries application would disqualify them or family members from obtaining a green card or US citizenship	
No	155 (47.6)
Yes	171 (52.5)
Has experienced (or knows someone who has experienced) an immigration raid at work or at home	
No	275 (84.4)
Yes	51 (15.6)
Has been (or knows someone who has been) detained or deported by immigration authorities	
No	174 (53.4)
Yes	152 (46.6)
Has faced deportation proceedings	
No	323 (99.1)
Yes	3 (0.9)
Fears getting deported	
No	205 (62.9)
Yes	121 (37.1)
Did not leave home or stayed away from certain areas to avoid the police or immigration authorities	
No	80 (24.5)
Yes	246 (75.5)
Has avoided travelling by car, bus, train, or plane to avoid internal checkpoints or TSA authorities	
No	102 (31.3)
Yes	224 (68.7)
Has been watched by law enforcement on the street or in a public place	
No	255 (78.2)
Yes	71 (21.8)
Has been stopped for no good reason by law enforcement	
No	298 (91.4)
Yes	28 (8.6)
Has been asked to show proof of citizenship or legal status by a police officer or other law enforcement authority	
No	314 (96.3)
Yes	12 (3.7)
Has seen immigration authorities in their neighborhood	
No	259 (79.5)
Yes	67 (20.6)
Has been exposed to immigration enforcement	
None	28 (8.6)
One or more times	298 (91.4)
Immigration enforcement exposure trend since March 2020, ^a mean (SD)	2.05 (0.51)
Stayed the same/decreased (<mean)	203 (72.2)
Increased (≥mean)	78 (27.8)

^a Based on mean responses to "since March has this increased (3), stayed the same (2), or decreased (1)?" Individual responses were averaged across the 6 follow-up questions asked after immigration enforcement items 5-10

associated with significantly higher odds of depression (adjusted odds ratio [aOR]=1.24; 95% confidence interval [CI]: 1.10, 1.40) (Table 3). Compared with men, women were significantly more likely to report higher odds of depression (aOR=1.92; 95% CI: 1.12, 3.31). Participants who were fearful of deportation were significantly more likely to report an increased likelihood

of depression than were those who did not report similar fears (aOR=1.24; 95% CI: 1.10, 1.40) (Table 4).

DISCUSSION

This study was conducted to examine the association between exposure to immigration enforcement and depression.

In our sample of undocumented young adults in California, more than half were depressed, and almost everyone reported exposure to the immigration enforcement system. An increase in the immigration enforcement score was significantly associated with 24% higher odds of depression.

Our finding that increased immigration enforcement was associated with higher odds of depression is consistent

Table 3. Adjusted regression results predicting the association between immigration enforcement score and depression

Variable	OR	95% CI
Immigration enforcement score	1.24***	1.10, 1.40
Gender		
Female	1.92*	1.12, 3.31
Male	1.00	1.00, 1.00
Race/ethnicity		
Latino	1.00	1.00, 1.00
Asian/Pacific Islander	0.68	0.34, 1.34
DACA status ^a		
No DACA	1.00	1.00, 1.00
DACA	0.97	0.55, 1.71
Age (years)		
18-24	1.00	1.00, 1.00
25-30	1.19	0.61, 2.33
31+	0.39	0.12, 1.33
Highest level of education		
High school or less	1.00	1.00, 1.00
Some college/community college	1.05	0.55, 2.00
College or graduate school	0.80	0.36, 1.74
Employed		
No	1.00	1.00, 1.00
Yes	0.84	0.50, 1.43
Enrolled in school		
No	1.00	1.00, 1.00
Yes	0.93	0.39, 2.21
Speaks English at home		
No	1.00	1.00, 1.00
Yes	0.87	0.44, 1.72
Health insurance		
No	1.00	1.00, 1.00
Yes	0.77	0.42, 1.42
Constant	0.89	0.22, 3.66

OR, odds ratio; *P<.05, ***P<.001. CI, confidence interval

^a DACA, Deferred Action for Childhood Arrivals

with reports about the harmful effects of immigration enforcement on immigrants' mental health.^{2,3,6,15,17-19} Undocumented immigrants likely contended with an increasingly hostile immigration enforcement climate and fears associated with COVID-19. The uncertainty about the pandemic and ongoing immigration enforcement actions may have contributed to the high level of depression in this group of respondents.

Almost all participants disclosed at least one exposure to the immigration enforcement system, which underscores the ubiquity of such experiences among

undocumented immigrants. Those who reported deportation fears in particular were significantly more likely to be depressed. Deportation fears increase undocumented immigrants' reluctance to apply for a driver's license, seek assistance from government agencies, walk outside, open bank accounts, participate in public events, and enroll their children in after-school programs, which may increase isolation and immigration enforcement-related stress and contribute to poor mental health.^{17,20} During the pandemic, undocumented immigrants were concerned about accessing COVID-19 testing and treatment

services, citing immigration-related consequences for themselves or their family members.³¹ Although our results are consistent with other findings of an association between immigration enforcement and mental health,^{2,3,6,17} studies on the compounding effects of COVID-19, immigration enforcement, and depression are needed.

In this study, women were 92% more likely to report depression than were men—a finding that is consistent with national reports of the higher negative impact of the pandemic on women's mental health.³² Women faced unique challenges during the pandemic, including a disproportionate rate of job loss and increased caregiving responsibilities, which may have led to poorer mental health compared with men.³³ Undocumented women in particular may have faced the added burdens of the immigration enforcement system and elevated COVID-19 risk associated with work in essential jobs.³³ Future studies may assess the gendered impact of immigration enforcement during the pandemic.

Although DACA and non-DACA recipients reported insignificant differences in depression, we found a reduced likelihood of depression among DACA recipients. This finding supports previous findings of lower depressive symptoms among DACA recipients compared with their non-DACA undocumented counterparts.^{26,34} Although COVID-19 may have presented extraordinary challenges, DACA status may have conferred some protections from the compound effects of COVID-19 and immigration enforcement. Because DACA status grants access to employment, those with DACA may have had access to COVID-19 testing and other health care resources through their employers. Research on the short- and long-term mental health effects of immigration enforcement experiences during the COVID-19 pandemic is needed. Such studies may reveal the impact of COVID-19 and immigration

Table 4. Adjusted regression results predicting the association between exposure to the immigration enforcement system and depression

Variable	OR	95% CI
Reports a time when they did not apply for 1 or more noncash government benefits because of worries application would disqualify them or family members from obtaining a green card or US citizenship		
No	1.00	1.00, 1.00
Yes	1.31	0.79, 2.17
Has experienced (or knows someone who has experienced) an immigration raid at work or at home		
No	1.00	1.00, 1.00
Yes	0.72	0.33, 1.53
Has been (or knows someone who has been) detained or deported by immigration authorities		
No	1.00	1.00, 1.00
Yes	1.07	0.61, 1.85
Has faced deportation proceedings		
No	1.00	1.00, 1.00
Yes	0.22	0.02, 2.79
Fears getting deported		
No	1.00	1.00, 1.00
Yes	1.84*	1.04, 3.23
Did not leave home or stayed away from certain areas to avoid the police or immigration authorities		
No	1.00	1.00, 1.00
Yes	1.37	0.72, 2.59
Has avoided travelling by car, bus, train, or plane to avoid internal checkpoints or TSA authorities		
No	1.00	1.00, 1.00
Yes	1.66 ⁺	0.92, 2.97
Has been watched by law enforcement on the street or in a public place		
No	1.00	1.00, 1.00
Yes	1.34	0.67, 2.67
Has been stopped for no good reason by law enforcement		
No	1.00	1.00, 1.00
Yes	0.48	0.19, 1.19
Has been asked to show proof of citizenship or legal status by a police officer or other law enforcement authority		
No	1.00	1.00, 1.00
Yes	1.29	0.28, 5.85
Has seen immigration authorities in their neighborhood		
No	1.00	1.00, 1.00
Yes	1.57	0.77, 3.17
Constant	0.91	0.21, 3.97

Analyses adjust for all sociodemographic variables. OR, odds ratio; ⁺P<.10, *P<.05. CI, confidence interval

enforcement on the mental health of undocumented immigrants.

Strengths and Limitations

This study is among the first in which the association between immigration enforcement exposures and depression has been examined among undocumented young adult immigrants during the COVID-19 pandemic. Unlike in previous studies, we focused on both direct and indirect immigration enforcement-related experiences among undocumented immigrants, allowing us

to account for the different ways undocumented immigrants may encounter the immigration enforcement system. Despite the small sample size, a strength of this study design is the inclusion of undocumented Asian participants, who faced increased anti-Asian hate and discrimination during the pandemic.

However, this study does have limitations. The COVID-19 pandemic was unprecedented, and the mental health impacts in the United States have been reported.³² The pandemic also coincided with a heightened anti-

immigrant climate, which was intensified by continued immigration enforcement efforts during the earliest periods of the lockdown. Despite this context, our results are consistent with reports on the mental health impacts of immigration enforcement that were published before the pandemic.^{2,15} Although we used a robust immigration enforcement exposures measure, several alternative forms of immigration enforcement were not included. The past few years have seen an increase in the use of e-surveillance (eg,

global positioning system tracking, ankle monitors, telephonic reporting, and the facial recognition smartphone app SmartLINK) by the US Department of Homeland Security.³⁵ Additional studies are needed to evaluate the mental health impacts of these surveillance systems.

Our convenience sample of undocumented young adults may not represent the circumstances of all undocumented people in California or the United States. Our sample may also represent a healthier segment of the undocumented population in the state. Although a generally healthy sample could bias our results toward the null, our findings are indicative of the influence of immigration enforcement on mental health. Even in California, a state where immigration laws have been generally inclusive in recent years, almost all survey participants reported exposure to the immigration enforcement system.

The cross-sectional nature of our study precludes causal interpretations. These data are also self-reported, which could bias results if respondents were comparing themselves to members of their peer groups. However, our assessment of depressive symptoms was based on a validated instrument, which likely curbs such bias. Although some immigration enforcement exposures preceded the pandemic, the challenges brought on by the global crisis may have exacerbated the impact of immigration enforcement actions on mental health. Future studies may include exploration of specific measures of immigration enforcement during the COVID-19 pandemic.

CONCLUSION

The COVID-19 pandemic coincided with a heightened anti-immigrant climate, which was intensified by persistent immigration enforcement efforts. Immigration enforcement policies and practices may manifest as everyday

violence, which can impact the mental health of undocumented immigrants. Although California currently has inclusive state immigration policies, the experiences of undocumented immigrants with the immigration enforcement system may counter the benefits of a generally favorable context. Researchers should consider the mental health implications of a punitive immigration enforcement system. Although mental health practitioners are best positioned to offer short-term remedies, policymakers should examine the far-reaching impacts of immigration policies on local communities.

ACKNOWLEDGMENTS

Research reported in this publication was supported by the National Institute of Child Health and Human Development (NICHD) (R01HD109194-01). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health. The authors acknowledge Alex Nguyen, MPH, who assisted with survey development, and thank Sofia De Arrigunaga, MD, MPH; Vanessa Beltran, MPH; Santiago Romero-Brufau, MD, PhD; Fernanda Gutierrez Matos, MPH, CHES; Ximena Tovar, MPH; Lucia Rosado, MD, MPH; and Evelin Garcia for translating and providing feedback on the Spanish survey. The authors also acknowledge the BRAVE COVID-19 Community Advisory Board for guidance and feedback throughout all aspects of the study.

CONFLICT OF INTEREST

No conflicts of interest reported by authors.

AUTHOR CONTRIBUTIONS

Research concept and design: Nwankwo, Choi, Sudhinaraset; Acquisition of data: Choi, Sudhinaraset; Data analysis and interpretation: Nwankwo, Choi, Li, Sudhinaraset; Manuscript draft: Nwankwo, Choi, Li, Sudhinaraset; Statistical expertise: Sudhinaraset; Acquisition of funding: Sudhinaraset; Administrative, technical or material support: Choi, Li, Sudhinaraset; Supervision: Sudhinaraset

REFERENCES

- Hacker K, Chu J, Leung C, et al. The impact of immigration and customs enforcement on immigrant health: perceptions of immigrants in Everett, Massachusetts, USA. *Soc Sci Med*. 2011; 73(4):586-594. <https://doi.org/10.1016/j.socscimed.2011.06.007>
- Rhodes SD, Mann L, Siman FM, et al. The impact of local immigration enforcement policies on the health of immigrant Hispanics/Latinos in the United States. *Am J Public Health*. 2015; 105(2):329-337. <https://doi.org/10.2105/AJPH.2014.302218>
- Hacker K, Anies M, Folb BL, Zallman L. Barriers to health care for undocumented immigrants: a literature review. *Risk Manag Healthc Policy*. 2015;8:175-183. <https://doi.org/10.2147/RMHP.S70173>
- Gelatt J, Koball H, Bernstein H. State immigration enforcement policies and material hardship for immigrant families. *Child Welfare*. 2019; 96(5):1-28.
- Potochnick S, Chen JH, Perreira K. Local-level immigration enforcement and food insecurity risk among Hispanic immigrant families with children: national-level evidence. *J Immigr Minor Health*. 2017;19(5):1042-1049. <https://doi.org/10.1007/s10903-016-0464-5>
- Wang JSH, Kaushal N. Health and mental health effects of local immigration enforcement. *Int Migr Rev*. 2018;53(4):970-1001. <https://doi.org/10.1177/0197918318791978>
- Hardy LJ, Getrich CM, Quezada JC, Guay A, Michalowski RJ, Henley E. A call for further research on the impact of state-level immigration policies on public health. *Am J Public Health*. 2012;102(7):1250-1253. <https://doi.org/10.2105/AJPH.2011.300541>
- Migration Policy Institute. Profile of the unauthorized population: United States. Last accessed January 31, 2023 from <https://www.migrationpolicy.org/data/unauthorized-immigrant-population/state/US>
- Johnson H, Perez CA, Mejia MC. Immigrants in California. Last accessed March 1, 2022 from <https://www.ppic.org/wp-content/uploads/jtf-immigrants-in-california.pdf>
- Pew Research Center. U.S. unauthorized immigrant population estimates by state, 2016. Last accessed March 1, 2022 from <https://www.pewresearch.org/hispanic/interactives/u-s-unauthorized-immigrants-by-state/>
- Romani M. Collusion in California's Central Valley: the case for ending sheriff entanglement with ICE. ACLU of Northern California. Last accessed March 24, 2022 from https://www.aclunc.org/sites/default/files/ICE_report_10_2-11-22-final-web.pdf
- California Advisory Committee to the U.S. Commission on Civil Rights. *Understanding the Impact of Immigration Enforcement on California Children in K-12 Schools. A Report of the California Advisory Committee to the U.S. Commission on Civil Rights*. Last accessed March 10, 2022 from <https://www.usccr.gov/files/2021/2021-01-25-CA-SAC-Immigration-Enforcement-Report.pdf>
- Morrissey K. ICE arrests 46 in San Diego County over month-long operation. *The San Diego Union-Tribune*. September 2, 2020. Last accessed March 24, 2022 from <https://www.sandiegouniontribune.com/news/immigration/story/2020-09-01/ice-arrests-san-diego>

14. Mia MA, Griffiths MD. The economic and mental health costs of COVID-19 to immigrants. *J Psychiatr Res.* 2020;128:23.
15. Bruzelius E, Baum A. The mental health of Hispanic/Latino Americans following national immigration policy changes: United States, 2014-2018. *Am J Public Health.* 2019;109(12):1786-1788. <https://doi.org/10.2105/AJPH.2019.305337>
16. Coleman M, Kocher A. Detention, deportation, and immigrant incapacitation in the U.S. post 9/11. *Geogr J.* 2011;177(3):228-237.
17. Arbona C, Olvera N, Rodriguez N, Hagan J, Linares A, Wiesner M. Acculturative stress among documented and undocumented Latino immigrants in the United States. *Hisp J Behav Sci.* 2010;32(3):362-384.
18. Becerra D, Hernandez G, Porchas F, Castillo J, Nguyen V, Perez González R. Immigration policies and mental health: examining the relationship between immigration enforcement and depression, anxiety, and stress among Latino immigrants. *J Ethn Cult Divers Soc Work.* 2020;29(1-3):43-59. <https://doi.org/10.1080/15313204.2020.1731641>
19. Becerra D. Anti-immigration policies and fear of deportation: a human rights issue. *J Hum Rights Soc Work.* 2016;1(3):109-119.
20. Wong TK, Shklyan K, Isorena A, Peng S. The impact of interior immigration enforcement on the day-to-day behaviors of undocumented immigrants. Last accessed April 2, 2022 from <https://usipc.ucsd.edu/publications/usipc-working-paper-1.pdf>
21. Sabo S, Shaw S, Ingram M, et al. Everyday violence, structural racism and mistreatment at the US-Mexico border. *Soc Sci Med.* 2014;109:66-74. <https://doi.org/10.1016/j.socscimed.2014.02.005>
22. Fleming PJ, Novak NL, Lopez WD. US immigration law enforcement practices and health inequities. *Am J Prev Med.* 2019;57(6):858-861. <https://doi.org/10.1016/j.amepre.2019.07.019>
23. Marin MF, Lord C, Andrews J, et al. Chronic stress, cognitive functioning and mental health. *Neurobiol Learn Mem.* 2011;96(4):583-595. <https://doi.org/10.1016/j.nlm.2011.02.016>
24. Horse AY, Jeung R, Matriano R. Stop AAPI hate national report (3/19/20-9/30/21). Last accessed March 1, 2022 from <https://stopaapihate.org/national-report-through-september-2021/>
25. Lei Z, Erica L, Eunice K. Xenophobia & racism. University of Minnesota. Last accessed March 1, 2022 from <https://immigrantcovid.umn.edu/xenophobia-racism>
26. Sudhinaraset M, Ling I, Gao L, Chavarin J, Gee GC. The association between Deferred Action for Childhood Arrivals, health access, and mental health: the role of discrimination, medical mistrust, and stigma. *Ethnic Health.* 2020:1-13. <https://doi.org/10.1080/13557858.2020.1850647>
27. Andresen EM, Malmgren JA, Carter WB, Patrick DL. Screening for depression in well older adults: evaluation of a short form of the CES-D (Center for Epidemiologic Studies Depression Scale). *Am J Prev Med.* 1994;10(2):77-84. [https://doi.org/10.1016/S0749-3797\(18\)30622-6](https://doi.org/10.1016/S0749-3797(18)30622-6)
28. Ross J, Hua S, Perreira KM, et al. Association between immigration status and anxiety, depression, and use of anxiolytic and antidepressant medications in the Hispanic Community Health Study/Study of Latinos. *Ann Epidemiol.* 2019;37:17-23. e3. <https://doi.org/10.1016/j.annepidem.2019.07.007>
29. Molina KM, Estrella ML, Durazo-Arvizu R, et al. Perceived discrimination and physical health-related quality of life: the Hispanic Community Health Study/Study of Latinos (HCHS/SOL) Sociocultural Ancillary Study. *Soc Sci Med.* 2019;222:91-100. <https://doi.org/10.1016/j.socscimed.2018.12.038>
30. Young ME, Tafolla S. Latinx and Asian immigrants across California regions have different experiences with law and immigration enforcement. UCLA Center for Health Policy Research. Last accessed January 30, 2023 from <https://healthpolicy.ucla.edu/publications/Documents/PDF/2021/LatinxAsianImmigrants-DifferentExperiences-factsheet-nov2021.pdf>
31. Galletly CL, Lechuga J, Dickson-Gomez JB, Glasman LR, McAuliffe TL, Espinoza-Madrigal I. Assessment of COVID-19-related immigration concerns among Latinx immigrants in the US. *JAMA Network Open.* 2021;4(7):e2117049.
32. Kearney A, Hamel L, Brodie M. Mental health impact of the COVID-19 pandemic: an update. Kaiser Family Foundation. Last accessed April 2, 2022 from <https://www.kff.org/coronavirus-covid-19/poll-finding/mental-health-impact-of-the-covid-19-pandemic/>
33. Gomez-Aguinaga B, Dominguez MS, Manzano S. Immigration and gender as social determinants of mental health during the COVID-19 outbreak: the case of US Latina/os. *Int J Environ Res Public Health.* 2021;18(11):6065.
34. Venkataramani AS, Shah SJ, O'Brien R, Kawachi I, Tsai AC. Health consequences of the US Deferred Action for Childhood Arrivals (DACA) immigration programme: a quasi-experimental study. *Lancet Public Health.* 2017;2(4):e175-e181. [https://doi.org/10.1016/S2468-2667\(17\)30047-6](https://doi.org/10.1016/S2468-2667(17)30047-6)
35. U.S. Department of Homeland Security. *Alternatives to Detention.* Immigration Customs and Enforcement. Last accessed February 7, 2023 from <https://www.ice.gov/features/atd>