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ORIGINAL PAPER

Fear of Deportation and Associations with Mental Health Among Michigan Residents of Middle Eastern & North African Descent

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Abstract

Anti-immigrant rhetoric and immigration policy enforcement in the United States over the last 2 decades has increased attention to fear of deportation as a determinant of poor health. We describe its association with mental health outcomes among Middle East and North African (MENA) residents of Michigan. Using a convenience sample of MENA residents in Michigan (n = 397), we conducted bivariate and multiple variable regression to describe the prevalence of deportation worry and examine the relationship between deportation worry and depressive symptoms (PHQ-4 scores). We found that 33% of our sample worried a loved one will be deported. Deportation worry was associated with worse mental health ($p < 0.01$). Immigration policies are health policies and deportation worry impacts mental and behavioral health.

Keywords Deportation worry · Mental health · Immigration policy

Introduction

Increased anti-immigrant rhetoric and immigration policy enforcement in the United States over the last 2 decades has increased attention to deportation—and fear of deportation—as a determinant of health outcomes for immigrants [1]. Deportation is the forced removal of an immigrant—typically but not always targeting undocumented immigrants—from the US by the government. Deportation can have severe psychological, economic, and health impacts on not just the deportee, but also their family members and other close members of their social network [2]. Like other chronic stressors, anxiety over having a loved one deported, can impact mental health and impact health behaviors [3, 4].

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Given the negative impacts of deportation and the recent immigrant socio-political environment, fear of deportation is salient for immigrant communities. Fear of deportation within a community increases when immigration enforcement tactics become more aggressive [2]. A recent study showed that about 75% of Latino non-citizens in the US fear that a family member, close friend, or themselves "could be deported" and that level has remained stable between 2007 and 2018. In contrast, about half of Latino US citizens had this fear in 2018, a marked increase from 2013 to 33% reported this fear [5]. To our knowledge, there is no descriptive research exploring level of deportation fear among people from Middle East and North African (MENA) countries.

Studies among Latino populations have shown that fear of deportation leads to poor health outcomes. Two studies of Mexican-origin populations in California and Arizona showed that fear of deportation was common and that this was associated with increased cardiovascular risk factors [3, 6]. Other studies have also shown that among Latino populations, fear of deportation measures are associated with chronic stress, anxiety, feelings of anger, or other mental health concerns [4, 7, 8]. For example, a national study of 1493 foreign-born and US-born Latinos showed that those who worried about a friend or family member getting deported were more likely to require mental health services [7]. Some evidence also shows a link between deportation

concerns and substance use behaviors as coping mechanisms [9–11]. The hypothesized mechanism for the links between deportation worry and health outcomes include behavioral (i.e. coping behaviors in response to the stressor) and physiological (i.e. chronic activation of a stress response) [2].

MENA communities in the US are likely to also experience fear of deportation and its negative impacts on health. In the post-9/11 period, MENA populations have been the target of anti-immigrant sentiment, anti-Muslim sentiments, ethnic profiling, and immigration policy enforcement [12]. While many people of MENA descent in the US are not Muslim, non-Muslim people can still be targets of anti-Muslim sentiment because they are assumed to be Muslim by US residents. Evidence shows that discrimination in the post-9/11 period caused psychological distress among people of MENA descent [13], but research did not examine the specific construct of fear of deportation. More recently, Samari and colleagues have shown the negative impact of the "Muslim Ban" on birth outcomes among immigrants from Muslim-majority nations [12]. The Muslim Ban is an executive order enacted by President Trump in 2017 that prohibited citizens of 7 countries that are predominantly Muslim from entering the United States [14]. While not the same as fear of deportation, this recent research points to the possibility that anxiety and uncertainty caused by changes in immigration policy can have an impact on health [2].

In this paper, we aim to fill a gap in the literature on fear of deportation and its association with mental health among MENA populations. Specifically, we use data collected from a cross sectional survey of MENA adults in Michigan. Michigan has the second largest population of MENA people after California, including a large population of Chaldeans from Iraq. In this paper, we (a) describe prevalence and correlates of fear of deportation among this population, and (b) examine whether fear of deportation is associated with poor mental health outcomes measured via the Patient Health Questionnaire (PHQ-4).

Methods

All study procedures were reviewed and approved by the University of Michigan Health Sciences and Behavioral Sciences Institutional Review Board.

Participants

Data came from a cross-sectional survey exploring health behavior, health knowledge and attitudes, and social determinants among a community convenience sample of adults 18 years of age and older and self-identifying as either Arab or Chaldean (i.e. people, typically Eastern-Rite Catholic, who trace their ancestry to ancient Mesopotamia in Iraq) living in Southeast Michigan. Southeast Michigan is home to the second largest MENA population in the USA (around 211,000 of Arab descent plus around 40,000 of Chaldean/Assyrian descent according to 2017 census estimates).

Data Collection

Self-administered surveys were collected in 2019 at 12 community sites (e.g. grocery stores, local eateries, clinics, mosques, churches, community-based organizations, and community events) in three counties between May and September 2019. Recruitment was completed through posters, fliers and in-person outreach. Participants were given the option of completing either a pen and paper or an online survey form, with assistance if needed from trained, bilingual interviewers. Surveys were available in English and Arabic, and participants were given a modest monetary incentive of $25.

Measures

Mental health symptoms were assessed with the four item PHQ-4 [15] which asked, how often have you been bothered by any of the following problems?; (1) Little interest or pleasure in doing things, (2) Feeling down, depressed, or hopeless, (3) Feeling nervous, anxious, or on edge, and (4) Not being able to stop or control worrying, all of which were answered with a 1–4 scale, with 1 being "not at all" and 4 being "nearly every day". Higher scores are indicative of more symptoms of depression and anxiety. Alpha for the four items in our sample was 0.91. The validity of the PHQ-4 has been reported in several prior studies [16, 17].

Our key independent variable was deportation worry. It was assessed by asking participants if they worry that a family member or someone they are close to will be deported (5- point Likert scale: not at all worried—extremely worried). We defined having 'deportation worry' as anyone that expressed any worry (i.e. any response other than 'not at all worried'). Other independent variables we assessed were knowing someone who was deported, perceived discrimination, and health insurance coverage. To measure knowing someone who was deported, we asked 'Have you, a family member, or someone you are close to been deported?' with response options of 'yes' or 'no.'

To measure perceived discrimination, we used the Williams 9-item Everyday Discrimination scale [18]. Respondents indicated how often they experience nine types of discrimination with six response options ranging from 'Never' to 'Almost Everyday'. We computed a mean across the 9 items, which resulted in a score range of 1–6 [18]. Health insurance coverages ('yes' or 'no') was assessed by asking participants if they have any type of healthcare coverage.

Socio-demographic variables assessed included; age (collapsed into 4 groups; 18–35, 30–45, 45–65, and > 65), household income (collapsed into 4 groups; Under $10,000, $10,000–$49,999, $50,000–$99,999, and >$ 100,000, education (collapsed into 4 groups; high school or less, some college, college graduate, graduate school or higher), gender, country of birth (US vs. not US), marital status (No/Yes), and health insurance coverage (yes/no). These are all variables shown to be linked to mental health status.

Analyses

All analyses were conducted using SPSS version 25. Bivariate analyses (t-tests) examined differences in the proportion of those experiencing any deportation worry by socio-demographic factors. Multiple variable linear regression model was used to examine the association between PHQ-4 score (mental health) and deportation worry. We conducted a regression model to examine the relationship between mental health and deportation worry while controlling for socio-demographic variables and perceived discrimination and health insurance status. Health insurance coverage could impact access to mental health services and thus impact responses on the PHQ-4. Perceived discrimination was included since discrimination may also impact PHQ-4 scores and thus including them in the model can help identify the independent relationship between deportation worry and mental health. In all cases, alpha values less than 0.05 were considered significant.

Results

Sample Characteristics

In our sample (n = 397), 64% were female and most (73%) respondents identified as Arab while 27% identified as Chaldean. 67% were foreign-born. For religion, 64% were Muslim, 34% Christian, and 3% were had some other religious affiliation. More detailed socio-demographics are available in Table 1.

Prevalence and Correlates of Deportation Worry

Overall, 33% of respondents expressed at least some amount of deportation worry. In bivariate analyses, respondents were more likely to have deportation worry if they were female ($p < 0.002$), had lower levels of education ($p = 0.002$), were unemployed ($p = 0.026$), or knew someone who was deported ($p < 0.001$). See full results of bivariate analyses between Deportation Worry and socio-demographics in Table 1.

Relationship Between Mental Health & Deportation Worry

The mean PHQ-4 score for the sample was 6.61 (SD: 3.48, range: 1–16). More depression and anxiety symptoms were evident among those expressing any deportation worry compared to those with no worry (mean 7.38 vs. 6.23, $p < 0.01$).

We conducted a multiple linear regression examining relationship between mental health (PHQ-4 scores) and deportation worry while controlling for socio-demographic variables, knowing someone who was deported, and perceived discrimination. Those with deportation worries had worse mental health symptoms than those without deportation worries ($b = -1.238$, $p = 0.005$) (see Table 2).

Discussion

We found that deportation worry was a salient concern for nearly one-third of our MENA sample in Michigan. Those who reported being worried about the deportation of family or friends more mental health symptoms. We also found that being a woman, being unemployed, having low education, and knowing someone who was deported were all more likely to experience deportation worry. These findings suggest that concern about deportation is an important factor to consider for the MENA population. In this section, we situate these finding in the existing literature and discuss their implications.

Our study was the first to our knowledge to examine deportation worry among MENA populations and the findings are similar to those conducted with Latinos in the US. In both cases, deportation worry has been shown to contribute to poor mental health [4, 8]. In other research with Latinos in the US, deportation worry was found to be associated with other health issues such as cardiovascular disease and hypertension [3, 19]. Future research with MENA populations should examine these same questions to determine whether deportation worry has more wide-ranging health impacts beyond mental health and include bio-markers or health record data to document health impacts.

Our study was conducted within the socio-political context of the Trump administration which was characterized by anti-immigrant rhetoric and an increase in Immigration and Customs Enforcement agents making arrests [2, 20]. Previous research has shown that fear increased in immigrant communities during this period [21]. Some recent evidence shows that deportation worry has been steady among undocumented Latino immigrants across the Bush, Obama, and Trump administration but that deportation worry has increased markedly among Latino *citizens* during the Trump administration [2]. This may suggest that the situation for undocumented immigrants did not fundamentally change

Table 1 Sociodemographic information for sample of MENA participants

Variable	Full analytic sample (n = 397)		No deportation worry (n = 267)		Deportation worry (n = 130)		p-value
	N	%	n	%	n	%	
Gender							
Male	144	36.3	111	77.1	33	22.9	0.002*
Female	253	63.7	156	61.7	97	38.3	
Ethnicity							
Chaldean	106	26.7	75	70.8	31	29.2	0.370
Arab	291	73.3	192	66.0	99	34.0	
Foreign-born							
Yes	265	67.1	177	66.8	88	33.2	0.740
No	130	32.9	89	68.5	41	31.5	
English only at home							
Yes	11	2.9	10	90.9	1	9.1	0.084
No	373	97.1	246	66.0	127	34.0	
Religion							
Muslim	249	63.4	169	67.9	80	32.1	0.430
Christian	133	33.8	88	66.2	45	33.8	
Baha'i	1	0.3	0	0.0	1	100.0	
None/Atheist/Agnostic/Other	10	2.5	8	80.0	2	20.0	
Education							
High school or less	130	33.2	71	54.6	59	45.4	0.002*
Some college	98	25.0	69	70.4	29	29.6	
College Grad	120	30.6	89	74.2	31	25.8	
Postgraduate	44	11.2	34	77.3	10	22.7	
Marital status							
Married/living as married	215	54.6	144	67.0	71	33.0	0.286
Divorced/Widowed/Separate	37	9.4	21	56.8	16	43.2	
Single, never married	142	36.0	100	70.4	42	29.6	
Occupation							
Employed	198	50.4	142	71.7	56	28.3	0.026*
Unemployed	75	19.1	39	52.0	36	48.0	
Homemaker	30	7.6	22	73.3	8	26.7	
Student	55	14.0	39	70.9	16	29.1	
Retired	22	5.6	17	77.3	5	22.7	
Disabled	5	1.3	2	40.0	3	60.0	
Other	8	2.0	4	50.0	4	50.0	
Income							
< $10,000	59	15.3	36	61.0	23	39.0	0.061
$10,000–$49,999	208	54.0	133	63.9	75	36.1	
$50,000–$99,999	76	19.7	58	76.3	18	23.7	
≥ $100,000	42	10.9	33	78.6	9	21.4	
Knows someone deported ?							
Yes	25	6.3	8	32.0	17	68.0	0.000*
No	371	93.7	258	69.5	113	30.5	
Health insurance coverage							
Yes	342	87.2	233	68.1	109	31.9	0.560
No	50	12.8	32	64.0	18	36.0	

*p < 0.05, **p < 0.01

Table 2 Multiple linear regression examining relationship between mental health PHQ 4, deportation worry, controlling for socio-demographic variables among population of MENA adults in Michigan

Variable	n = 314		
	Estimate	SE	p-value
Gender			0.590
Male	6.593	0.325	–
Female	6.814	0.234	–
Age			0.454
18–30	6.998	0.302	–
30–45	6.298	0.436	–
45–65	6.390	0.477	–
> 65	7.530	0.929	–
Ethnicity			0.071
Chaldean	5.553	0.679	–
Arab	7.167	0.301	–
Foreign-born			0.195
Yes	6.487	0.267	–
No	7.126	0.353	–
English only at home			0.465
Yes	7.602	1.197	–
No	6.714	0.188	–
Religion			0.053
Muslim	6.213	0.327	–
Non-Muslim	7.830	0.593	–
Education			0.015*
High school or less	7.166	0.381	–
Some post-high school	7.483	0.371	–
College Grad	6.209	0.342	–
Postgraduate	5.614	0.569	–
Marital status			0.432
Married/living as married	6.569	0.282	–
Not Married	6.909	0.287	–
Occupation			0.630
Employed	6.643	0.268	–
Not employed	6.840	0.284	–
Income			0.619
< $10,000	7.146	0.556	–
$10,000–$49,999	6.524	0.266	–
$50,000–$99,999	6.846	0.420	–
≥ $100,000	7.179	0.604	–
Know someone who has been deported			0.788
Yes	6.548	0.723	–
No	6.751	0.193	–
Any deportation worry			0.005**
Yes	7.605	0.357	–
No	6.367	0.226	–
Perceived discrimination			0.006**
Low	6.180	0.273	–
High	7.296	0.274	–
Health insurance coverage			0.110
Yes	6.612	0.201	–
No	7.504	0.513	–

*p < 0.05, **p < 0.01

across the administrations (i.e. there was no protection from deportation), but that the amplified anti-Latino sentiment and verbal threats by the Trump administration caused a new type of fear for citizens. It is possible that a similar pattern would hold for MENA adults. More research is needed to determine whether deportation worry decreases when a new presidential administration takes a less aggressive approach to immigration enforcement and minimizes anti-immigrant sentiment and how much it persists for subgroups who are undocumented or closely connected to that population. Without complete amnesty for undocumented immigrants as well as other immigrants at risk of being deported, deportation worry is likely to continue to be a prominent factor within immigrant communities. Future research should help identify strategies for this population to manage their health in the face of these worries.

While more research is needed to fully understand the link between deportation worry and health, including more robust evidence that the relationships is causal, improving population mental health should consider deportation worry as a key factor. First, immigrant communities may need ample stress and coping resources that help people appraise and cope with deportation worry [22, 23].Second, training for health professionals needs to include information on the US immigration enforcement system and how it has a substantial impact on the health of immigrant communities. This is a social determinant of health that needs to be better considered in both health care and public health services. Clinicians can offer services to patients, as our research suggested they may be at higher risk for mental health issues. Finally, health professionals can help advocate for immigration policies that minimize harms to communities. Work by groups like Physicians for Human Rights or Public Health Awakened are good examples of health professionals organizing for public health-informed immigration policies [24].

Limitations

While this study has many strengths, the findings should be considered in light of several limitations. First, the analyses used cross sectional data and therefore we cannot determine temporality of deportation worry and respondent's mental health scores. While we hypothesize that deportation worry leads to poor mental health, it is also plausible that poor

mental health leads individuals to worry about deportation more. Second, we relied on a convenience sample of MENA adults in Michigan. This sample may not be representative of the MENA population in Southeast Michigan or MENA populations elsewhere in the country. Our recruitment strategy at public locations or social gatherings may have led to a sample of people with less deportation worry or fewer mental health concerns than the overall population. Third, we relied on a measure of deportation worry that was a single item, did not reflect worries about their own deportation (because of risks related to revealing their own documentation status), and that had been previously used primarily with Latino immigrants. While we are confident that the item captured an important dimension of deportation worry, it is possible an item developed specifically for MENA populations with more items would have more fully captured the construct. Finally, respondents that participated may not have felt comfortable revealing the entire truth of their experience due to shame or fear of reprisal.

Conclusion

Deportation worry is prevalent among our MENA sample and may be an important factor in mental health for MENA populations. While more research and healthcare interventions are certainly needed, immigration policies in the US should be formulated to minimize harms to ensure that all communities can thrive.

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