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# Deported Mexican migrants: health status and access to care

# Migrantes mexicanos deportados: exploração do estado de saúde e acesso a serviços de saúde

## **ABSTRACT**

**OBJECTIVE:** To describe the health status and access to care of forced-return Mexican migrants deported through the Mexico-United States border and to compare it with the situation of voluntary-return migrants.

**METHODS:** Secondary data analysis from the Survey on Migration in Mexico's Northern Border from 2012. This is a continuous survey, designed to describe migration flows between Mexico and the United States, with a mobile-population sampling design. We analyzed indicators of health and access to care among deported migrants, and compare them with voluntary-return migrants. Our analysis sample included 2,680 voluntary-return migrants, and 6,862 deportees. We employ an ordinal multiple logistic regression model, to compare the adjusted odds of having worst self-reported health between the studied groups.

**RESULTS:** As compared to voluntary-return migrants, deportees were less likely to have medical insurance in the United States (OR = 0.05; 95%CI 0.04;0.06). In the regression model a poorer self-perceived health was found to be associated with having been deported (OR = 1.71, 95%CI 1.52;1.92), as well as age (OR = 1.03, 95%CI 1.02;1.03) and years of education (OR = 0.94 95%CI 0.93;0.95).

**CONCLUSIONS:** According to our results, deportees had less access to care while in the United States, as compared with voluntary-return migrants. Our results also showed an independent and statistically significant association between deportation and having poorer self-perceived health. To promote the health and access to care of deported Mexican migrants coming back from the United States, new health and social policies are required.

**DESCRIPTORS:** Emigration and Immigration. Mexico. United States. Health Services Accessibility. Health Evaluation. Health Inequalities.

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# **RESUMO**

**OBJETIVO:** Analisar o estado de saúde e o acesso aos serviços de saúde de imigrantes mexicanos deportados na fronteira entre México e Estados Unidos.

MÉTODOS: Foram analisados dados secundários do Inquérito sobre Migração na Fronteira do Norte do México de 2012. O inquérito é contínuo e desenhado para descrever fluxos migratórios na fronteira entre México e Estados Unidos com amostra de população móvel. Foram analisados indicadores de saúde e de acesso aos serviços de saúde dos imigrantes deportados em comparação aos imigrantes que retornaram voluntariamente. Nossa amostra análise incluiu 2.680 migrantes de retorno voluntário, e 6.862 deportados. Foi utilizado modelo de regressão logística ordinal para comparar as probabilidades da pior autopercepção de saúde entre os grupos estudados.

**RESULTADOS:** Em comparação com os migrantes de retorno voluntário, deportados foram menos propensos a ter seguro médico em os Estados Unidos (OR = 0,05, IC95% 0,04;0,06). No modelo de regressão uma pior saúde autopercebida foi associado com ser deportado (OR = 1,71, IC95% 1,52;1,92), bem como a idade (OR = 1,03, IC95% 1,02;1,03) e os anos de escolaridade (OR = 0,94, IC95% 0,93;0,95).

**CONCLUSÕES:** De acordo com nossos resultados, deportados tinha menos acesso aos cuidados, enquanto em os Estados Unidos, em comparação com os migrantes de retorno voluntário. Nossos resultados também mostraram uma associação independente e estatisticamente significativa entre a deportação e ter pior saúde auto-percebida. Novas políticas de saúde pública são necessárias para promover a saúde e o acesso aos serviços de saúde nos imigrantes mexicanos deportados dos Estados Unidos.

DESCRITORES: Migração Internacional. México. Estados Unidos. Acesso aos Serviços de Saúde. Avaliação em Saúde. Desigualdades em Saúde.

# INTRODUCTION

The deportation of Mexican migrants from the United States (US) has increased in the past years. From 2003 to 2009, according to Mexico's National Migration Institute, there were between 525,000 and 600,000 deportations.<sup>a</sup> In 2012 alone, 369,492 persons were deported from the US to Mexico.<sup>b</sup> Most of them were deported through the Mexico-US border, arriving into cities where they lacked social or family support networks, and facing difficult situations including social stigmatization, lack of employment, and violence.<sup>4,12</sup>

While in the US, Mexican migrants (and Latinos/ Hispanics in general) have less access to health services, as well as lower socioeconomic status and worse jobrelated conditions, as compared to non-Hispanic whites. This in turn is associated with poorer health. Mexican migrants also face cultural, economic and language barriers to healthcare access. <sup>7,c,d</sup> As a result, they tend to postpone the search for medical care, <sup>e</sup> using other informal therapeutic itineraries instead such as self-medication or telephone consultation with relatives, sometimes with negative health consequences. <sup>11</sup> All of

<sup>&</sup>lt;sup>a</sup> París Pombo MD. Procesos de repatriación: experiencias de las personas devueltas a México por las autoridades estadounidenses. Tijuana, B.C.: Woodrow Wilson International Center for Scholars/ El Colegio de la Frontera Norte; 2010 [cited 2014 Mar 20]. Available from: http://www.wilsoncenter.org/sites/default/files/PARIS%20POMBO%20PAPER.pdf

<sup>&</sup>lt;sup>b</sup> México. Secretaria de Gobernación. Repatriación de mexicanos. 2012 [cited 2013 Jul 14]. Available from: http://www.politicamigratoria.gob.mx/es\_mx/SEGOB/Repatriacion\_de\_mexicanos\_2012

<sup>&</sup>lt;sup>c</sup> U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality. National Healthcare Disparities Report 2012. Rockville (MD): AHRQ; 2013 [cited 2014 Mar 20]. Available from: http://www.ahrq.gov/research/findings/nhqrdr/nhdr12/nhdr12\_prov.pdf d Salgado de Snyder N, González T, Bojorquez I, Infante C. Migración México-Estados Unidos: consecuencias para la salud. Cuernavaca: Instituto Nacional de Salud Pública; 2007. (Colección Perspectivas en Salud Pública).

e Nigenda G, Ruiz-Larios JA. Servicios de salud y seguro popular para familias con migrantes. Mexico (DF): Instituto Nacional de Salud Pública de México/Fundación Mexicana para la Salud/CONACYT; 2008.

the above is exacerbated in the case of undocumented migrants. <sup>1,4,5</sup> As many of them are undocumented migrants, deportees are thus part of a more disadvantaged group in terms of health and health care access. On the other hand, a significant proportion of them have a long history of residence in the US. <sup>f</sup> For those who are deported after many years of living in that country, some of whom went there as children and have interiorized the US culture, forced return means a serious disruption in their lives. <sup>3</sup> Other deportees are caught within hours or days of crossing the border into the US, and they can still be suffering the health consequences of a long and risky journey. Also, deportees might not receive appropriate health care during detention prior to deportation. <sup>4</sup>

Because of the above, deportees might be at risk of diverse health conditions, and at the same time lack access to the required health services. Information about returning migrants' health is needed in order to inform policies aimed at their social integration. <sup>15</sup> While some studies have started to document some health risks faced by Mexican deportees, <sup>1</sup> the information currently available is still scarce.

The aim of this study was to analyze the general health status and access to health services of Mexican migrants deported through the Mexico-United States border.

## **METHODS**

We conducted a secondary data analysis from the 2012 Encuesta de Migración en la Frontera Norte de México (EMIF-N – Survey on Migration in Mexico's Northern Border), a periodic survey designed to describe migratory flows at the Mexico-US border. The detailed methodology of the survey is described elsewhere. Firefly, it is based on mobile-population sampling methods, selecting space-time points at which in-transit persons 15 years of age or older are invited to participate, if they fulfil inclusion criteria. EMIF-N is an administrative survey conducted by the Mexican government in order to obtain statistical data, and no personal identification information is collected as part of it. The EMIF-N's questionnaire includes sociodemographic information, and questions related to migratory experience, employment, and other variables. The questionnaires and other documentation are available elsewhere.f

As part of EMIF-N, different population flows are surveyed. For this article, we analyzed data from two of those flows: deportees, and those entering Mexico from the US. The sampling points for the first flow are the places right at the border through which migrants are deported. The second flow is sampled at different

points in the border cities, including border crossings, and also bus and airplane terminals. At those places, potential respondents are asked where they come from, and where they were born, and they are included in the sample if they come from the US and were born in Mexico. The second flow can include both deportees, and migrants who return to Mexico voluntarily.

The main indicator of health status for this analysis was self-perceived health, measured through the question: "Generally, how would you rate your health?" For descriptive statistics, we categorized answers as very good/good *versus* fair/bad/very bad. For the final regression model, we employed the original configuration of the variable in a 5-point Likert scale.

We also analyzed the presence or absence, during the past 15 days, of one or more of the following symptoms of physical and emotional health: fever, diarrhea, cough, despair, sadness and lack of interest in things.

For those who had worked while in the US, we analyzed the presence or absence of health insurance at work. We also analyzed the presence or absence of other sources of health insurance in the US, including Medicare, Medicaid, and private insurance. Another indicator was the presence or absence of health insurance in Mexico, either public or private. Questions about health insurance in Mexico were only asked in the deportees' questionnaire, so analyses of this variable were limited to this group.

Also, we analyzed having *versus* not having received medical care, given the need. The analysis in this case was limited to 1,432 respondents (15.2% of the sample), who reported having required medical attention during their last stay in the US.

We compared deportees to voluntary-return migrants. We considered as deportees all persons surveyed by EMIF-N as part of the deportees flow, and those entering Mexico from the US who answered the question "What is your main reason for returning to Mexico?" with the option "I was returned by the Border Patrol". We considered as voluntary-return migrants those who answered the same questions with other options (lack of job, insufficient income, violence or insecurity, did not like it, health reasons, wanting to live/work in Mexico, family visit, vacation or holiday, retiring, fear of deportation, discrimination). Those who selected the option "other" were excluded, as in this case it was not possible to distinguish between voluntary and forced return.

We explored the distribution of variables in the whole sample, and by comparison groups, with frequency

<sup>&</sup>lt;sup>f</sup> Secretaría de Gobernación, Consejo Nacional de Población; Instituto Nacional de Migración, Unidad de Política Migratoria, Centro de Estudios Migratorios; Secretaría de Relaciones Exteriores; Secretaría del Trabajo y Previsión Social; El Colegio de la Frontera Norte. Encuesta sobre Migración en la Frontera Norte de México. 2011. Tijuana, México; 2013. p.27-39.

tables and measures of central tendency and dispersion. We tested the association between comparison group (deportees *versus* voluntary-return migrants) and the indicators of health status and access to care by means of logistic regression models, adjusted by age, gender and years of schooling. Finally, we adjusted an ordinal logistic regression model (proportional odds model), with self-perceived health in a 5-point Likert scale as the dependent variable. The model's assumptions were tested with Brant's test of parallel regression.

We expected that the length of time spent in the US would have a differential effect on the health of deportees and voluntary return migrants. While many studies have reported that time in the receiving country tends to have a negative impact on migrants' health,d we expected that for deportees this effect would be increased, as their condition of undocumented migrants would expose them to more stress and worse living conditions in general. Also, deportees with a long stay in the US could resent the effect of forced displacement, separation from family and friends, and lack of identification with the country they were returning to, more than voluntary return migrants.3 To test this hypothesis, we included an interaction between time in the US ( $< 10 \ versus \ge 10 \ years$ ) and comparison group in the regression.9

#### **RESULTS**

The analysis sample included 2,680 voluntary-return migrants, and 6,862 deportees. Table 1 shows the general characteristics of the sample in each comparison group. Statistically significant differences were observed for all variables. As compared to voluntary-return migrants, deportees were more likely to be male, younger and of lesser educational attainment. While a higher percent of voluntary-return migrants perceived their health as fair/bad/very bad, this difference disappeared after adjusting by age and other covariables (Tables 2 and 4). Deportees were more likely to have experienced at least one physical or emotional symptom in the past 15 days.

Access to care was also different between groups. While 36.2% of voluntary-return migrants who worked in the US had health insurance, only 9.2% of deportees had this benefit. When considering other sources of health insurance, including Medicare, Medicaid and others, the difference was over 50 percentage points. Sixty-five per cent of deportees were returning to Mexico without having health insurance in this country, and the percentage was even higher (94.0%) among those who had lived in the US for 10 years or more (not shown in Table).

Table 1. Characteristics of return migrants, by comparison group. Mexico's Northern Border, 2012.

		Voluntary return migrants		Deported	
Variable	$(N = 2,680)^a$		(N = 6,862)		n
	n	% or median (interquartile range)	n	% or median (interquartile range)	— р
Male	1,717	64.1	5,846	85.2	< 0.01
Age		43 (33-53)		28 (22-36)	< 0.01
Years of education		9 (6-12)		9 (6-9)	< 0.01
Marital status					
Married/Living with partner	2,012	75.1	4,125	60.1	
Single	423	15.8	2,403	35.0	< 0.01
Divorced/Separated	159	5.9	300	4.4	
Widowed	86	3.2	32	0.5	
Months in US (median, interquartile range)		8 (3-24)		0.23 (0.10-12)	< 0.01
Self-perceived health (Fair/Bad/Very bad)	356	13.3	520	7.8	< 0.01
≥ 1 physical symptom	229	8.5	671	10.0	0.03
≥ 1 emotional symptom	193	7.2	2,071	30.9	< 0.01
Had health insurance at work in the USb	713	36.2	129	9.2	< 0.01
Had other health insurance in the US <sup>c</sup>	1,460	55.0	87	4.2	< 0.01
Received medical care while in the US (if required)	596	70.8	328	62.6	< 0.01
Has health insurance in Mexico <sup>d</sup>	NA		1,532	34.9	NA

NA: Not applicable

<sup>&</sup>lt;sup>a</sup> Sample size can vary between comparisons due to missing data.

<sup>&</sup>lt;sup>b</sup>Limited to those who had worked while in the US.

<sup>&</sup>lt;sup>c</sup>Including medicare, medicaid, private insurance.

<sup>&</sup>lt;sup>d</sup>The question was asked of the deportee sample only.

Table 2. Associations between deportation, and indicators of health and access to care. Mexico's Northern Border, 2012.

Variable	Odds ratio	95%CI
Self-perceived health (Fair/Bad/Very bad)	1.21	1.00;1.47
≥ 1 physical symptom	1.12	0.92;1.35
≥ 1 emotional symptom	5.52	4.62;6.60
Had health insurance at work in the USb	0.20	0.16;0.25
Had other health insurance in the US <sup>c</sup>	0.05	0.04;0.06
Received medical care while in the US (if required)	0.94	0.71;1.25

<sup>&</sup>lt;sup>a</sup> All comparisons adjusted by age, gender, and years of education.

Table 2 shows the odds ratios (OR) associated with deportation, with different indicators of health status and access to care as dependent variables. Deportees were more likely to perceive their health as fair/bad/very bad (OR = 1.21; 95%CI 1.00;1.47), and also to report emotional symptoms (OR = 5.52; 95%CI 4.62;6.60). On the other hand, they were less likely to have medical insurance in the US (OR = 0.05; 95%CI 0.04;0.06) and also to receive care given the need (OR = 0.94; 95%CI 0.71;1.25), although this last comparison did not reach statistical significance.

The model in Table 3 again showed a direct association between being deported and reporting poorer self-perceived health (OR = 1.71; 95%CI 1.52;1.92). The interaction between comparison group and time in the US (< 10 *versus*  $\geq$  10 years) had a p-value of 0.07, which can be considered significant in tests of hypothesis for interaction. As indicated by the OR for the interaction (0.68), contrary to the authors' hypothesis, time in the US was protective for deportees, while it increased the possibility of having worse self-perceived health among voluntary-return migrants (OR = 1.18). Considering that this

could reflect that, among deportees, those who had stayed in the US for only a few days might be actually resenting the impacts of their migratory journey, we adjusted a model with time in the US categorized as  $\leq 1$  month (1) versus > 1 month (0). The results are shown in Table 4. According to the model results, among deportees a stay of one month or less increased the odds of reporting worse self-perceived health. In both models, the cut-off points of the latent variable followed the expected proportional increase.

#### **DISCUSSION**

According to our results, deportees had less access to care while in the US, as compared with voluntary-return migrants. The difference was observed even for medical insurance benefits among those who worked, probably indicating irregular employment conditions related to the undocumented status of these migrants. On the other hand, only 34.9% of deportees returned to Mexico having health insurance in this country, way below the 79.0% coverage of health insurance for the general Mexican population, according to the 2012

Table 3. Ordinal logistic multiple regression model for self-perceived health: Model 1.ª Mexico's Northern Border, 2012.

Variable	Odds ratio	95%CI	р
Deportee (reference: voluntary return)	1.71	1.52;1.92	< 0.01
Lived in the $US \ge 10$ years	1.18	0.81;1.73	0.39
Interaction deportee <sup>b</sup> lived in the US ≥ 10 years	0.68	0.44;1.03	0.07
Gender (male)	0.93	0.84;1.04	0.20
Age (years) <sup>c</sup>	1.03	1.02;1.03	< 0.01
Years of education <sup>c</sup>	0.94	0.93;0.95	< 0.01
Cut 1	-0.43	-0.71;-0.14	
Cut 2	3.08	2.79;3.38	
Cut 3	5.77	5.39;6.15	
Cut 4	8.58	7.56;9.60	

<sup>&</sup>lt;sup>a</sup> Proportional odds model. Dependent variable: self-perceived health in ordinal Likert scale (higher score indicates worst perceived health).

<sup>&</sup>lt;sup>b</sup> Limited to those who had worked while in the US (N = 3,783).

<sup>&</sup>lt;sup>c</sup> Including medicare, medicaid, private insurance.

<sup>&</sup>lt;sup>b</sup> Multiplicative term between Deportee and lived in the US ≥ 10 years.

<sup>&</sup>lt;sup>c</sup> As continuous variables.

Table 4. Ordinal logistic multiple regression model for self-perceived health: Model 2.2 Mexico's Northern Border, 2012.

Variable	Odds ratio	95%CI	р
Deportee (reference: voluntary return)	1.45	1.27;1.66	< 0.01
Lived in the $US \le 1$ month	0.92	0.74;1.16	0.50
Interaction deportee <sup>b</sup> lived in the US $\leq 1$ month	1.32	1.03;1.70	0.03
Gender (male)	0.95	0.85;1.05	0.31
Age (years) <sup>c</sup>	1.03	1.02;1.03	< 0.01
Years of education <sup>c</sup>	0.94	0.93;0.95	< 0.01
Cut 1	-0.38	-0.67;-0.09	
Cut 2	3.13	2.83;3.43	
Cut 3	5.82	5.44;6.20	
Cut 4	8.63	7.61;9.66	

<sup>&</sup>lt;sup>a</sup> Ordinal logistic regression model. Dependent variable: self-perceived health in ordinal Likert scale (higher score indicates worst perceived health).

National Health and Nutrition Survey.<sup>g</sup> The percentage was even lower for deportees who had lived in the US for a longer period. The Latino/Hispanic population in the US is known to generally have limited health care access<sup>18,h</sup> and this disadvantage remains even after adjusting for socioeconomic status. 6 The reasons behind this low coverage include both economic disadvantage, and geographic, cultural and linguistic barriers to effective access.<sup>7,d</sup> However, even within this group deportees seem to come from a particularly vulnerable population. Mexico's health system faces an important challenge in this regard. While some efforts have been made to increase health care access for Mexican migrants,20 they usually do not take into account the special situation of deportees. Including both forced and voluntary return migrants in Mexico's future universal coverage scheme8 will be increasingly important, if the number of Mexicans coming back from the US continues to grow.

Our results also showed an independent and statistically significant association between deportation and having poorer self-perceived health. Diverse situations could explain the difference between deportees and voluntary-return migrants in this regard, among them that their undocumented migrant status places them at risk of worse living and work conditions. The finding that for deportees a stay of 10 or more years in the US was protective, while a stay of one month or less increased the possibility of worse self-perceived health, could mean that, among this group, those who had stayed in that country for only a few days were actually resenting the impacts of a dangerous border crossing.

Self-perceived (bad) health at the time on return to Mexico is the expression of an accumulation of vulnerabilities.4 Perceived health has been associated with mortality in longitudinal studies,<sup>21</sup> correlated with biomedical indicators of health status,14 and is also a general indicator of well-being, expressing subjectivity and idiosyncratic health ideals.2 On the other hand, deportation was also associated with increased odds of reporting emotional symptoms. Self-report of health and mental health symptoms have been shown to influence each other, so our results might also indicate the experience of a set of health problems, including somatic as well as mental aspects. 16 In both senses, our results point not only to the need for health care initiatives directed at return migrants, but to the importance of developing adequate policies for their economic, social and psychosocial inclusion.15

While the literature documents the difficulties that immigrants face in countries of arrival, few studies have so far addressed the health of forced-return migrants. Among these, a recent study reported experiences of enculturative stress among Salvadoran deportees, 10 and a series of studies on HIV risk among Mexican deportees show that the contextual conditions can increase or protect against risk-taking.<sup>13</sup> Also, although forced displacement due to conflict or natural disasters is not the same phenomenon as deportation, it shares its aspects of non-voluntariness and uncertainty. Among displaced populations, mental health problems have also been shown to increase. <sup>17</sup> Our study adds to this literature by documenting not only the health problems, but also the health access difficulties faced by forced-return migrants. All of the above stresses the need to develop global policies to offer health-care services to these populations.

 $<sup>^{\</sup>rm b}$  Multiplicative term between deportee and lived in the US  $\geq$  10 years.

<sup>&</sup>lt;sup>c</sup> As continuous variables.

<sup>8</sup> Instituto Nacional de Salud Pública; Secretaría de Salud. Encuesta Nacional de Salud y Nutrición 2012: resultados nacionales: síntesis ejecutiva. Cuernavaca, Mexico; 2012.

h United States Census Bureau. Income, poverty and health insurance coverage in the United States: 2009. Washington (DC); 2010. Available from: http://www.census.gov/prod/2010pubs/p60-238.pdf

One limitation of our study is the secondary use of EMIF-N data, which are collected with more general purposes and do not include precise indicators of health or access to care. In this sense, our analysis constitutes a preliminary exploration, which should be enriched by other, ad hoc studies. One interesting aspect would be to describe the health status and access to care of return migrants longitudinally, as our data was collected at

the time of entry into Mexico, and thus cannot reflect the positive or negative changes with time after return.

Health is a right, and a social justice issue which should be considered in all policies. Research on the health of deportees and voluntary-return migrants is necessary to inform policies aimed to the well-being of this population.

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