


Firearm-related threats before migrating to the USA from Latin America and the Caribbean

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ABSTRACT

Background Every year, thousands of people from Latin America and the Caribbean are migrating to the USA. Policy-makers have argued that US firearms are fuelling violence in these countries and are contributing to migration. The objective of this article is to examine the proportion of immigrants from Latin America and the Caribbean arriving at the US border who have previously been threatened with a firearm. This article further explores sociodemographic factors associated with the likelihood of previous firearm-related threats, whether those threats are associated with post-traumatic stress disorder, as well as the reasons behind those threats.

Methods Data were obtained from a survey of migrants recruited at the southern US border from March 2022 to August 2023. To be selected, respondents had to be 18 years of age or older, had to speak English or Spanish and come from a Latin American or Caribbean country. We used descriptive statistics and a logistic regression.

Results We analysed 321 cases. Roughly, 48% of respondents reported previous firearm-related threats. Males and respondents coming from Honduras, Venezuela and El Salvador were more likely to report previous firearm-related threats. There was a strong association between previous firearm-related threats and signs of post-traumatic stress disorder. Most threats occurred during robberies or extortions, but other threats were perpetrated by authorities, to prevent crime reporting, or by intimate partners.

Conclusion Understanding the violence, particularly firearm-related violence, experienced by those migrating to the USA from Latin America and the Caribbean could help guide policy discussion and actions.

INTRODUCTION

Annually, thousands of people across Latin America and the Caribbean are migrating to the USA.¹ Many of these countries present the highest rates of homicides worldwide² and fleeing violence is the main reason why people journey to the USA.^{3,4} Thousands of US firearms are trafficked to these countries and are associated with rates of firearm homicides in Central American and Caribbean countries.^{5,6} Other firearms are exported legally from the USA and later diverted to criminal networks within these countries.⁷ Media outlets and members of the US Congress have indicated that violence driven by US firearms is a key driver of migration.^{8,9} However, no study has examined the exposure to firearm threats experienced by those migrating to the USA.

The objective of this study is to characterise the proportion of Latin American and Caribbean

WHAT IS ALREADY KNOWN ON THIS TOPIC

- ⇒ Thousands of people are migrating to the USA from Latin America and the Caribbean.
- ⇒ Homicide rates in Latin American and Caribbean countries are among the highest worldwide and firearms play a major role.
- ⇒ US firearm markets have been associated with firearm-related violence in Central America and the Caribbean and US policy-makers have argued that this has contributed to migration.

WHAT THIS STUDY ADDS

- ⇒ We explored the proportion of US immigrants from Latin America and the Caribbean who have been threatened with a firearm before migrating to the USA.
- ⇒ We analysed sociodemographic factors associated with the likelihood of reporting firearm-related threats before migrating to the USA from Latin America and the Caribbean.
- ⇒ We examined the association between firearm-related threats and signs of post-traumatic stress disorder among Latin American and Caribbean immigrants and characterise the reasons behind firearm-related threats.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

- ⇒ Our findings can help guide discussions and actions around proper health resources at some entry points, international firearms trafficking and overall immigration policies.

immigrants who have been threatened with a firearm before arriving in the USA. This analysis is broken down by demographics (ie, sex and country of origin), reasons for leaving their country, as well as whether individuals present signs of post-traumatic stress disorder (PTSD). We further examine the reasons behind those firearm-related threats. Understanding the violence experienced by those migrating to the USA could help guide policy discussion and actions.

METHODS

This study is based on a survey of migrants recruited at the southern border of the USA. Participants were recruited from a humanitarian respite centre in McAllen, Texas. Many migrants who cross the US southern border seeking asylum turn themselves to US immigration authorities; after a vetting process, authorities take migrants to humanitarian respite centres to have basic needs met and arrange travel plans before migrants continue their journeys to



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Table 1 Descriptive characteristics of the sample of immigrants from Latin America and the Caribbean, 2023

	Percentage of total N=321	Percentage threatened with a firearm (n)	Percentage not threatened with a firearm (n)
Sex			
Female	67.0% (n=215)	54.2% (n=83)	78.6% (n=132)
Male	33.0% (n=106)	45.8% (n=70)	21.4% (n=36)
Age groups			
18–24	18.4% (n=59)	15.7% (n=24)	20.8% (n=35)
25–29	22.1% (n=71)	20.9% (n=32)	23.2% (n=39)
30–34	24.6% (n=79)	24.2% (n=37)	25.0% (n=42)
35–39	16.2% (n=52)	17.0% (n=26)	15.5% (n=26)
>40	18.7% (n=60)	22.2% (n=34)	15.5% (n=26)
Country			
Honduras	24.0% (n=77)	26.8% (n=41)	21.4% (n=36)
Venezuela	24.0% (n=77)	29.4% (n=45)	19.0% (n=32)
Nicaragua	15.6% (n=50)	13.7% (n=21)	17.3% (n=29)
Guatemala	9.7% (n=31)	5.9% (n=9)	13.1% (n=22)
El Salvador	7.5% (n=24)	10.5% (n=16)	4.8% (n=8)
Colombia	5.6% (n=18)	5.2% (n=8)	6.0% (n=10)
Mexico	3.4% (n=11)	2.0% (n=3)	4.8% (n=8)
Other Central/ South American countries	6.5% (n=21)	3.2% (n=5)	10% (n=16)
Caribbean countries	3.7% (n=12)	3.2% (n=5)	4% (n=7)
Years of education			
<7	28.7% (n=92)	26.1% (n=40)	31% (n=52)
7–9	18.7% (n=60)	20.3% (n=31)	17% (n=29)
10–12	28.7% (n=92)	30.1% (n=46)	27% (n=46)
>12	24.0% (n=77)	23.5% (n=36)	24% (n=41)
Worked in home country?			
Yes	79.4% (n=255)	83.7% (n=128)	76% (n=127)
No	19.9% (n=64)	15.7% (n=24)	24% (n=40)
Missing	0.6% (n=2)	0.7% (n=1)	0.7% (n=1)
Why did you leave your country?			
Forced displacement	45.4% (n=146)	52.9% (n=81)	39% (n=65)
Employment	10.3% (n=33)	7.2% (n=11)	13% (n=22)
Other	44.2% (n=142)	39.8% (n=61)	48% (n=81)
Post-traumatic Stress Disorder Checklist score			
>30 (high)	34.0% (n=109)	46.4% (n=71)	22.6% (n=38)
≤30 (low or moderate)	65.1% (n=209)	53.6% (n=82)	75.6% (n=127)
Missing	0.9% (n=3)		1.8% (n=3)

other US destinations. To be included in the study, respondents had to be ≥ 18 years old and migrating from Latin America or the Caribbean. Respondents had to enter within the last 14 days and had to understand Spanish or English. Recruiters explained the protocol and respondents provided verbal consent. 397 people were approached and 321 completed the survey (81%). There were no clear sociodemographic trends among those choosing not to participate. However, common reasons for not participating in the survey included illness, tiredness or lack of interest.

Table 2 Percentages and prevalence differences

	Percentage threatened with a firearm	PD	95% CI	
			Low	High
Sex				
Males	66.0%	32.1%***	22.1%	42.0%
Females	38.6%	(reference)		
Age groups				
18–24	40.7%	–13.9%	–31.0%	3.3%
25–29	45.1%	–17.5%*	–33.8%	–1.3%
30–34	46.8%	–7.5%	–23.3%	8.3%
35–39	50.0%	–7.9%	–24.7%	8.8%
>40	56.7%	(reference)		
Country				
Honduras	53.2%	24.7%**	8.6%	40.8%
Nicaragua	42.0%	14.1%	–3.1%	31.3%
Venezuela	59.2%	31.4%***	17.0%	45.8%
El Salvador	69.6%	39.3%***	17.8%	60.9%
Guatemala	30.0%	8.6%	–12.7%	29.9%
Other countries	33.3%	(reference)		
Years of education				
<7	44.9%	–10.1%	–25.2%	4.9%
7–9	51.7%	–11.2%	–26.7%	4.3%
10–12	49.5%	3.9%	–9.7%	17.5%
>12	47.4%	(reference)		
Worked in home country?				
Yes	50.8%	0.0%	–13.2%	13.2%
Why did you leave your country?				
Forced displacement	55.2%	5.9%	–4.7%	16.5%
Employment	33.3%	–7.4%	–24.6%	9.9%
Other	44.2%	(reference)		
Post-traumatic Stress Disorder Checklist score				
>30 (high)		27.3%***	17.2%	37.5%

Information in table 2 is based on 316 observations.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Respondents received a US\$50 gift card for their participation. Surveys were conducted by bilingual researchers from 13 March 2022 to 19 August 2023.

The survey queried demographic information as well as country of origin. It asked whether respondents worked in their home country before leaving and incorporated the following question: Can you tell me the main reason why you came to this country? The possible responses were settlement, employment, education, marriage/family formation or reunification, forced displacement, displacement due to climate events and other reasons. The survey includes the 20-item self-report PTSD Checklist for DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) to measure PTSD symptoms.¹⁰ A total symptom severity score ranges from 0 to 80 with a suggested cut-off of 31 or more as indicative of a probable PTSD diagnosis.¹¹

The primary outcome in this analysis is self-reported lifetime experience with firearm threats. Specifically, participants are asked 'Have you ever been threatened with a firearm?' If respondents report being previously threatened with a firearm, two follow-up questions are asked. The first inquires whether

the threat occurred in the respondent's home country, after leaving their country or both. The second (open-ended question) asks about the reasons why respondents were threatened with a firearm.

We used descriptive statistics to examine the proportion of migrants threatened with a firearm and used logistic regression to estimate adjusted associations between being threatened with a firearm and demographics, countries and PTSD symptoms. For the logistic regression, we proceeded with case deletion where data were missing ($n=5$). To aid interpretation, we recast the logistic regression coefficients as marginal effects which are interpreted as prevalence differences, rather than ORs. Finally, we encompassed reasons behind firearm-related threats into 13 categories; these categories were robberies, extortions, to not report a crime, kidnappings, was shot, sexual abuse/exploitation, encounters with strangers, intimate partner violence, witnessed a crime, to do something illegal, forced to flee or other. We used descriptive statistics to examine the frequency of these categories. As people may have been threatened with a firearm multiple times or various motives were recognised, respondents often reported multiple reasons.

RESULTS

In total, 321 participants enrolled. A description of respondents' demographics and characteristics is presented in table 1. Of note, most respondents were female (67.0%), between 18 and 40 years of age (81.3%), with less than 9 years of schooling (47.4%) and were employed in their home country (79.4%). Most respondents reported forced displacement as the reason for leaving their country (45.5%) and roughly one-third of respondents reported signs of PTSD (34.0%).

A large proportion of respondents were from Honduras, Venezuela, Nicaragua, Guatemala and El Salvador (80.7%). The remaining (19.3%) reported coming from Bolivia, Colombia, Cuba, Dominican Republic, Ecuador, Haiti, Mexico, Peru and

Panama. Roughly 47.7% ($n=153$) reported previous firearm-related threats. Close to 71.2% of those who reported previous threats with firearms said that it occurred in their home country, 15.7% during their journey and 13.1% in both.

Our adjusted analysis (table 2) indicates that men had an absolute prevalence of received firearm threats that were 32.1% (95% CI 22.1%, 42.0%) higher than women. Migrants from Honduras, Venezuela and El Salvador had a higher prevalence of received firearm threats than those coming from other Latin American/Caribbean countries. There is a significant association among those who reported previous firearm-related threats and signs of PTSD. Those who reported high levels of PTSD symptoms had a prevalence of received firearm threats that was 27.3% (95% CI 17.2%, 37.5%) than those with low or no symptoms.

Finally, when examining reasons why migrants reported being threatened (figure 1), 72.5% of respondents reported being victims of violent crimes such as robberies ($n=66$), extortions ($n=32$) and/or kidnappings ($n=13$). At least 14 respondents (9.2%) reported political repression or police threats and another 14 respondents (9.2%) reported being threatened not to report a crime or to keep quiet. Moreover, 16 people reported either sexual abuse/exploitation or intimate partner violence. Another eight respondents were shot at, while eight others were threatened after an encounter with a stranger.

DISCUSSION

Firearm threats are frequent among those migrating to the USA from Latin American and Caribbean countries. Roughly, half of migrants entering the US southern border have been threatened with a firearm. To put this in context, 21% of people in the USA report that they have personally been threatened with a firearm.¹² Moreover, certain subgroups are more likely to report previous firearm-related threats. Consistent with the literature on firearm victimisation, males are more likely to report a threat than women. Additionally, those coming from Honduras,

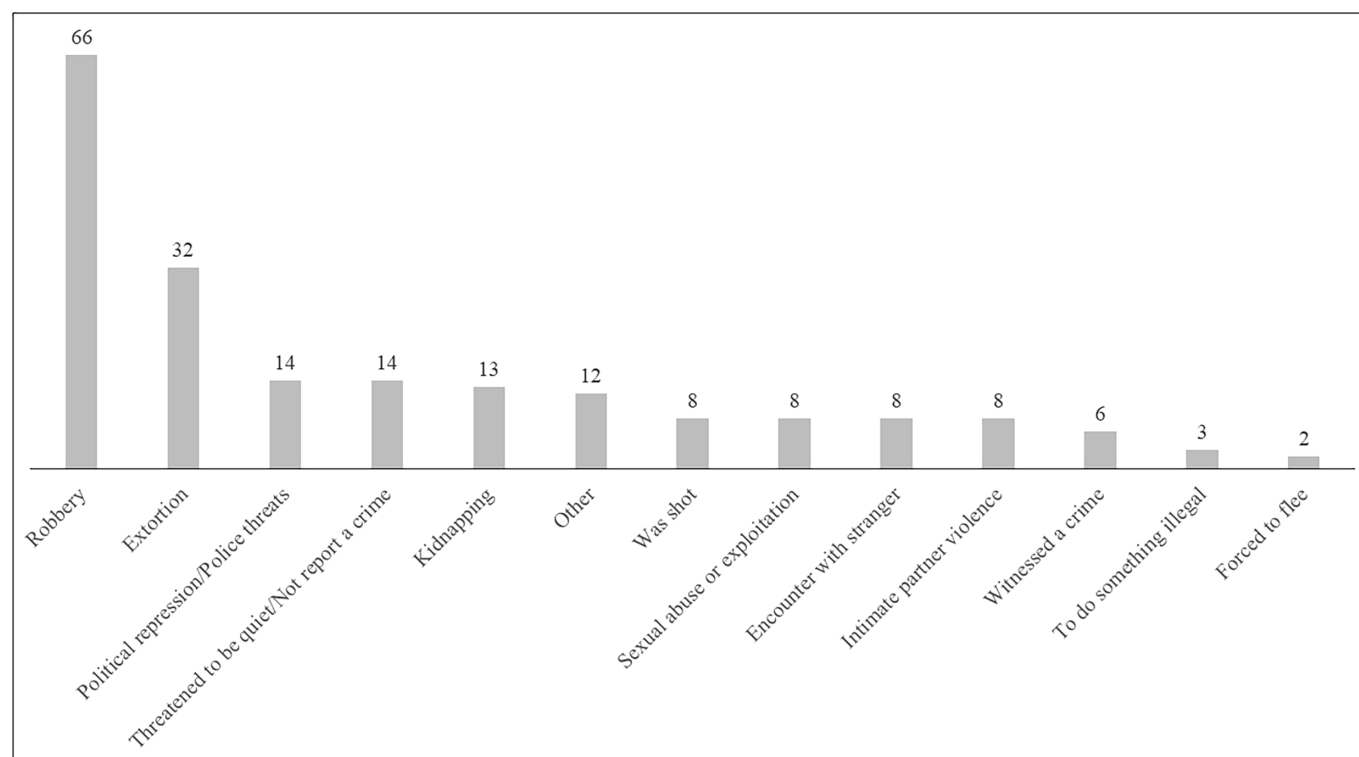


Figure 1 Reasons behind firearm-related threats reported by Latin American and Caribbean immigrants entering the USA, 2023.

El Salvador and Venezuela were more likely to report firearm threats. These are countries with some of the highest rates of firearm homicide in the world.¹³

We found that people migrating to the USA who had previously been threatened with a firearm were more likely to show signs of PTSD. This is consistent with studies that have concluded that victims of firearm-related crimes are more likely to report postemotional symptoms (ie, mistrust, insecurity and anxiety).¹⁴ While, victims of firearm-related threats reported in this study were likely robbed, extorted or kidnapped, our study highlights other reasons that are underdiscussed. For example, people are often threatened not to report a crime or are intimidated by authorities. In this regard, federal agencies monitoring the flow of migration in the USA should consider these experiences. In particular, those immigrating have elevated rates of firearm violence exposure and also have evidence of mental health symptoms (PTSD) associated with those exposures. Training on identifying these traumas and providing resources to guide people in seeking proper help at entry points is important.

Furthermore, the USA can play a role in reducing threats of firearm violence in these countries. US agencies indicate that a large portion of firearms recovered in crimes in the Dominican Republic, El Salvador, Honduras and Mexico originate in the USA.⁵ While there are limited data on firearms recovered in Venezuela, authorities in the USA have seized firearms intended to be trafficked to this country.¹⁵ Overall, efforts to mitigate international firearms trafficking from the USA should be considered. At the same time, the USA is a main legal exporter of firearms to countries such as Honduras, Guatemala and El Salvador. Reports suggest that these firearms are often diverted to criminal networks within recipient countries.⁷ Additionally, our results indicate that some firearm-related threats are perpetrated by police or threats involve political repression. When exporting firearms to these countries, better end-user controls should be discussed and considered.

Our study presents limitations. The survey was conducted in McAllen Texas and is not representative of all points of entry. Other complementary studies can focus on immigrants arriving in other states (ie, Caribbean immigrants arriving in Florida). Additionally, survey data were collected at a humanitarian respite centre serving mostly women or families travelling together. Even though our sample experiences a relatively high rate of threats with firearms, it is possible that we are underestimating the proportion given that males are more likely to be threatened with firearms. Another limitation of using surveys is recall bias. Despite these limitations, our study is the first survey that captures information on the intersection of firearm-related threats and people migrating to the USA.

Overall, immigrants are frequently threatened with firearms, often misused by authorities, and these threats are associated with signs of PTSD. US policy-makers should consider these results when providing resources to monitor entry points, addressing firearms trafficking and exports and discussing migration policies overall.

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Patient consent for publication Not applicable.

Ethics approval This study involves human participants and was reviewed and approved by the Colorado Multiple Institutional Review Board (COMIRB), the Institutional Review Board (IRB) for the University of Colorado Anschutz Medical Campus under protocol approval number 21-4175. Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Due to the sensitive nature of this research, we are not able to make data publicly available. However, if there are specific data questions regarding this publication, please reach out to LV at laura.x.vargas@cuanschutz.edu.

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