

FACTORS ASSOCIATED WITH THE NON-UTILIZATION OF HEALTHCARE SERVICES AMONG VENEZUELAN MIGRANTS IN PERU

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ABSTRACT

Objective. To estimate the prevalence and determine the factors associated with the non-utilization of healthcare facilities (NUHCF) among adult Venezuelan migrants in Peru. **Materials and Methods.** An analytical cross-sectional study of the "Survey of the Venezuelan Population Residing in Peru" 2018. We calculated the proportion of immigrants with NUHCF (immigrants with some symptom or malaise, illness, relapse of chronic illness, accident and discomfort, or other problem such as depression, fear, anger, anxiety, and stress, and who did not consider that it was serious or that they needed to visit a healthcare facility). Raw and adjusted (PRa) prevalence ratios (PR) for presenting NUHCF were estimated using generalized linear models. **Results.** The study included 2,144 Venezuelan migrants: 57.2% presented NUHCF, reporting reasons such as: not having money (64.5%), lack of health insurance (24.3%), self-medication (12.8%), and not having time (8.4%). Living in Arequipa (PRa: 0.69; 95% CI: 0.57-0.83) or Trujillo (PRa: 0.87; 95% CI: 0.76-0.99), suffering from a chronic disease (PRa: 0.83; 95% CI: 0.71-0.97), and being enrolled in the Seguro Integral de Salud (SIS) insurance (PRa: 0.28; 95% CI: 0.13-0.61) was associated with a lower probability of NUHCF. Belonging to an age group under 60 years was associated with a higher probability of NUHCF. **Conclusions.** One out of two Venezuelan migrants in Peru presents NUHCF. Having SIS increases the likelihood of Venezuelan migrants in Peruvian territory seeking medical attention. Increasing public health insurance for this population, which is currently low, could increase the utilization of health services.

Keywords: Transients and Migrants; Health Facilities; Health Services Accessibility; Venezuela; Peru (source: MeSH NLM)

INTRODUCTION

Throughout the world, the rate of the migrant population has increased due to the political, economic, or war situations faced by some countries^(1,2). It is estimated that in 2017, about 258 million people (3.4% of the world's population) lived outside their home country⁽³⁾. Latin America is no stranger to this phenomenon of international migration, particularly to the phenomenon of intraregional migration. Between 1970 and 2010, intraregional migration went from 24.0% of international migration to 63.0%⁽⁴⁾. In the last decade, an important migratory phenomenon of the Venezuelan population migrating towards neighboring countries has taken place as a result of the serious political-economic crisis

they are experiencing⁽⁵⁾. In 2019, Latin American countries, like Colombia (1.3 million), Peru (768,000), Chile (288,000), and Ecuador (263,000) are home to the largest number of Venezuelan refugees and migrants⁽⁶⁾.

Migration can increase the vulnerability of migrants and refugees to health problems due to increased exposure to risk factors during their migration travel, sexual and physical violence, unfavorable working conditions and poor living conditions, as well as food insecurity⁽⁷⁾. Similarly, there may be reasons for migration related to the search for medical care in the host country^(8,9). Even though there are international treaties for the protection of the human rights of migrants^(10,11), this population often faces barriers to receiving health care,

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and use these services at a lesser degree when compared to the local population, because of either a lack of documentation, geographical accessibility or purchasing power^(9,12,13).

In Peru, the number of Venezuelan immigrants has increased during the last decade, and they are considered the largest group of foreign residents (24.6% in 2017). Apart from being a host and transit country for the Venezuelan migration⁽¹⁴⁾, given the significant migration of Venezuelan population to the peruvian territory, and since access to health care is one of their main problems, the purpose of this study was to assess the prevalence and to determine the factors associated with the non-use of health services by Venezuelan migrants residing in Peru.

MATERIALS AND METHODS

DESIGN AND STUDY POPULATION

An analytical cross-sectional study of the "*Encuesta dirigida a la población venezolana que reside en el país*". (ENPOVE, in Spanish), conducted by the National Institute of Statistics and Informatics (INEI) during the months of November and December 2018, was carried out. ENPOVE is the first survey that provides information on demographic, health and social aspects, migratory situation, discrimination, violence and household characteristics of Venezuelans residing in five peruvian cities (Metropolitan Lima, Tumbes, Trujillo, Cusco and Arequipa), where 85.0% of this population in Peru is concentrated, according to the 2017 Census, reason why its results are representative for these cities⁽¹⁵⁾.

The primary sampling unit of ENPOVE 2018 was the block (urban geographical area bounded by roads), comprised of one or more adjoining dwellings or facilities. The secondary sampling unit was the dwelling or facility located within a block where there was at least one Venezuelan⁽¹⁵⁾. Data was collected through direct interviews, conducted during visits to the selected dwellings or facilities by previously trained personnel. Further details on sampling design, objectives, procedures and data collection can be found in the ENPOVE 2018 report⁽¹⁵⁾.

VARIABLES AND MEASUREMENTS

The variables included in this study were obtained from the ENPOVE survey. The name or code of the variable in the ENPOVE database appears in brackets.

Using as reference the study conducted by Benites-Zapata et al. on the peruvian population⁽¹⁶⁾, it was considered that

KEY MESSAGES

Research Motivation. Migrant populations, such as Venezuelans in Peru, have health needs that require care from the host healthcare systems.

Main Findings. In Peru, more than half of the Venezuelan migrant population over the age of 18 in need of medical care does not use health services. The city of residence, age group, having insurance, and having a chronic illness are associated with the use of health services.

Implications. The non-use of health services by the Venezuelan migrant population in Peru is high. Having health insurance increases the use of health services when there is a health need, although the ratio of insured immigrants is low.

the main variable would be the non-use of health care facilities (NUHCF) by a Venezuelan immigrant over the age of 18 who, since arriving in Peru, had reported having some symptom or discomfort, illness, relapse of a chronic illness, accident and discomfort or problems such as depression, fear, anger, anxiety or stress (P405) and who considered that it was not so serious or necessary to go (P407) to an institution that provided health services, which includes not having gone to a "MINSA health center", "EsSalud care center", "private practice" or "private clinic" (P406).

For the inclusion of variables with possible association to the NUHCF, the studies of Aday et al.⁽¹⁷⁾, Benites-Zapata et al.⁽¹⁶⁾, and of local epidemiological interest were used as reference. Thus, the independent variables considered in the study and their corresponding codes were: sex (male/female) (P204), age groups (in years) (P205), educational level (no education / full elementary / full secondary / non-university higher education / university higher education) (P501), marital status (single / married / cohabiting / other) (P206), city of residence (Metropolitan Lima, Arequipa, Cusco, Trujillo, Tumbes) (NOMBDEPA), overcrowding (How many people do you share the room with?; it was considered overcrowding when four or more people slept in one room) (P317), chronic illness (Do you have any chronic illness or discomfort? yes / no) (P402), disability (Do you have permanent limitations for: ...?, yes / no) (P408), health insurance (uninsured / Seguro Integral de Salud (SIS) / Peruvian Social Security (EsSalud) / private insurance) (P401) and ethnic self-identification (On the basis of your customs and ancestors, do you feel or consider yourself non-native / of African descent or native? (P512), and number of months since the arrival in Peru until the date of the survey (PMES, PANO, P303).

STATISTICAL ANALYSIS

The statistical program Stata® 14.2 (Stata Corp, College Station, TX, USA) was used for data analysis. The characteristics of the study population were described using means with their standard deviation for quantitative variables, and absolute frequencies and weighted proportions were used for categorical variables. The association between the variables was evaluated using the chi-square test or the adjusted Wald test, according to the type of variable. Subsequently, association measures were estimated using prevalence ratios (PR) along with their 95% confidence intervals (95%CI) between NUHCF and the independent variables using crude and adjusted ⁽¹⁸⁾ generalized linear models (GLM) of the Poisson family with link function (log). The inclusion of variables in the adjusted model considered those that resulted with a value of $p < 0.20$ in the crude analysis ⁽¹⁹⁾. All estimates considered ENPOVE's complex sample design and expansion factor using the svy command. A value of $p < 0.05$ was considered significant.

ETHICAL CONSIDERATIONS

The study did not require the approval of an ethics committee given that it was a secondary analysis of ENPOVE, whose data are of public knowledge and do not allow the identification of the evaluated participants. The survey and data can be accessed through the INEI website (<http://ineiinei.gob.pe/microdatos/>).

RESULTS

Data from a total of 2144 Venezuelan adult immigrants (expanded population: 134,347) in Peru (Figure 1) was analyzed, the majority of which were women (54.9%) from the age group from 18 to 29 years old (52.3%), single (38.5%), with full secondary education (42.0%), and only 6.7% considered themselves of African descent or native. Metropolitan Lima was the city with the highest number of respondents (96.2%). On average, the length of stay in Peru was eight months, and 12.2% live in overcrowded conditions. Having a chronic illness was reported by 21.4% of migrants, and 3.0% reported having a disability. The majority of migrants (93.3%) had no health insurance (Table 1).

With respect to health care, more than 50% did not use formal institutions that provided health services. NUHCF Venezuelan immigrants had been in Peru for an average of 8.7 ± 6.2 months, while those who did use health care institutions had an average stay of 10.4 ± 8.9 months.

Among the reasons for NUHCF, the Venezuelan immigrants indicate not having money (64.5%), not having health insurance (24.3%), self-medicating (12.8%) and not having time (8.4%).

The bivariate analysis found an association between NUHCF and the variables of sex, age, marital status, city of residence, report of chronic disease, number of months since arrival in Peru, participation in a health insurance plan and ethnicity, while there was not a significant association with the educational level, disability and overcrowding conditions (Table 2).

The multivariate analysis found that living in Arequipa (aPR: 0.69; 95%CI: 0.57-0.83), residing in Trujillo (aPR: 0.87; 95%CI: 0.76-0.99), having a chronic disease (aPR: 0.83; 95%CI: 0.71-0.97) and being affiliated to the SIS (aPR: 0.28, 95%CI: 0.13-0.61) was associated with a lower probability of NUHCF, compared to those residing in Metropolitan Lima, who do not suffer from chronic disease and do not have health insurance, respectively. By contrast, being 18 to 29 years old (aPR: 2.35, 95%CI: 1.25-4.44), 30 to 39 years old (aPR: 2.26, 95%CI: 1.19-4.28) and 40 to 59 years old (aPR: 2.43, 95%CI: 1.28-4.60) was associated with an increased likelihood of NUHCF, compared to people 60 years and older.

DISCUSSION

Migrant populations are often unprotected regarding their health care needs due to a lack of access to health services in the country of arrival. It was found that half of Venezuelans living in Peru do not seek care for their health needs. Considering that migrants in need of health services were analyzed, the results suggest a low prevalence of use of these services. Migrants who reside in Arequipa or Trujillo, who are chronically ill and who are affiliated to the SIS are less likely to be NUHCF compared to migrants who live in other cities, who are not chronically ill or who are not affiliated to the CHI. These findings indicate that a significant proportion of Venezuelan immigrants living in Peruvian territory are not receiving adequate care for their health problems, and given that they are a vulnerable population due to their migratory status that could compromise their individual, family or economic well-being.

More than half of Venezuelan immigrants residing in Peru reported NUHCF. In this regard, it has been reported that a similar percentage of the peruvian population shows NUHCF (53.9%)⁽¹⁶⁾. This finding is contrary to what is reported in other realities where, due to factors like the lack of documentation

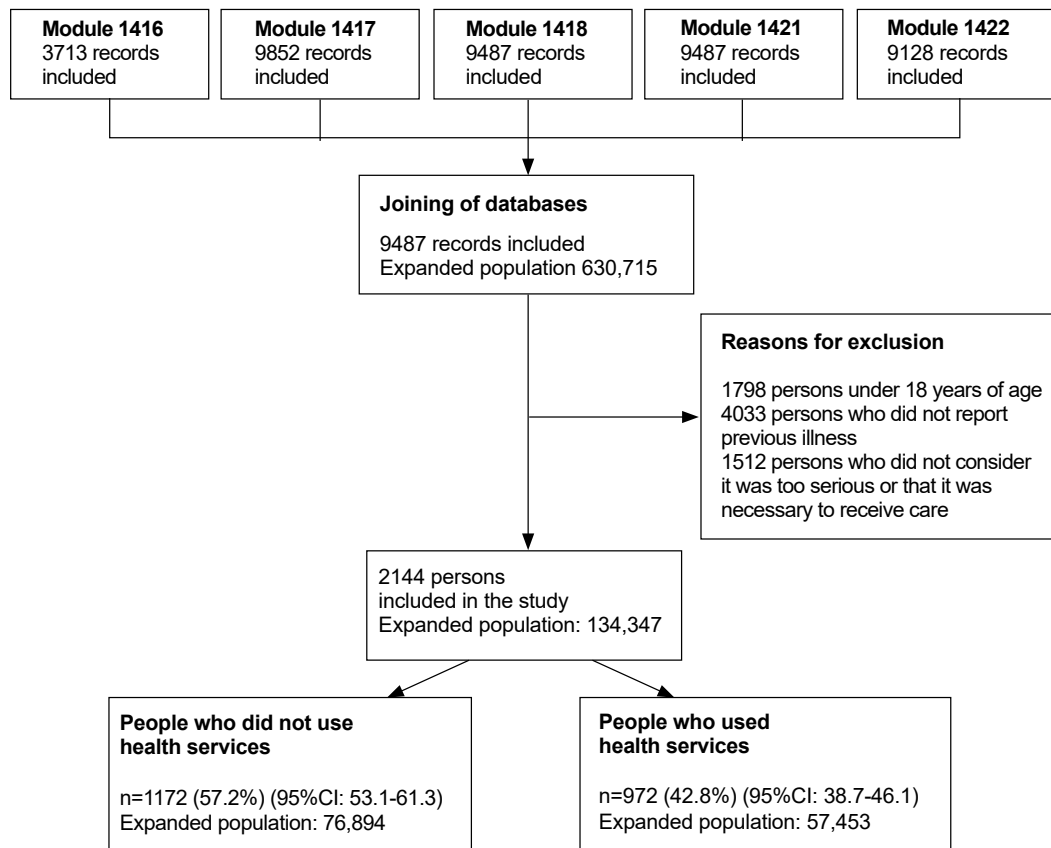


Figure 1. Flowchart of participants included in the study

or the lack of insurance, immigrants have a lower use of health services compared to the local population (13,20). Studies in Colombia and Brazil report an increased demand for health care as part of the Venezuelan migration phenomenon (21-23).

In low- and middle-income countries, an estimated eight million deaths per year occur due to poor quality care in health facilities. Humanitarian crises affect the normal functioning of health systems, already weak in those countries, thereby increasing the vulnerability to health issues of local and migrant populations (24). Furthermore, some studies have reported that between six months and two years after arrival in the country, migrants may develop emotional and mental health problems (25), which is worrisome in view of the low rate of insurance coverage among this population.

One of the findings of the study was the association between residence in cities other than the capital (Lima) and a lower probability of reporting NUHCF. Given that, historically, the largest proportion of Venezuelan migration

in Peru is concentrated in Lima (14), a significant proportion of the Venezuelan migrant population is not gaining access to the care that their health status requires. Hence, it is necessary to deepen the study of the determining factors of this phenomenon. The low prevalence of health service utilization can have implications for the health, well-being and job performance of migrants.

The migrant population is often characterized by being young and by moving to other territories in search of employment or educational opportunities. In the case of the Venezuelan migration in Peru, since it is composed of a predominately youth or young adult population, according to reports of the last few years (14) and to the findings of this study, it is to be expected that the majority is in good health and that a small percentage suffers from chronic illnesses, which would explain a higher proportion of NUHCF in the younger age groups and a lower probability of NUHCF among Venezuelans with chronic diseases.

It is, given the "healthy migrant phenomenon", according to which at the beginning of a migration, in spite of the

Table 1. Characteristics of the Venezuelan adults included in the study, ENPOVE 2018

Characteristics	Respondents included in the study		Non-use of health care institutions *		p value ‡
	Absolute frequency (n=2144)	Weighted proportion (95%CI)†	Absolute frequency (n=1172)	Weighted proportion (95%CI) †	
Sex					
Female	1133	54.9 (52.0-57.8)	592	55.3 (50.4-60.0)	0.156
Male	1011	45.1 (42.2-48.0)	580	59.6 (54.2-64.9)	
Age groups (years)					
18 to 29	1124	52.3 (48.9-55.7)	646	58.7 (54.0-63.3)	<0.001
30 to 39	596	27.6 (24.6-30.7)	312	56.4 (49.2-63.3)	
40 to 59	370	17.0 (14.4-19.6)	199	60.3 (52.4-67.8)	
60 to more	54	3.1 (1.8-4.3)	15	22.2 (11.4-38.7)	
Educational level					
No education	46	2.3 (1.4-3.2)	28	63.3 (41.7-80.6)	0.284
Full elementary	254	12.0 (9.7-14.4)	140	58.2 (49.3-66.5)	
Full secondary	893	42.0 (38.2-45.9)	497	54.4 (48.8-60.0)	
Non-university higher education	330	15.9 (13.6-18.3)	198	64.6 (55.6-72.6)	
University higher education	621	27.8 (24.3-31.2)	309	56.4 (49.7-62.8)	
Marital status					
Single	767	38.5 (35.2-41.8)	449	60.7 (54.7-66.3)	0.152
Cohabitants	815	37.6 (34.0-41.2)	432	54.8 (49.4-60.1)	
Married	445	19.4 (16.4-22.4)	239	57.7 (49.9-65.1)	
Other	117	4.5 (3.0-5.9)	52	46.3 (33.7-59.4)	
City of residence					
Metropolitan Lima	1251	96.1 (95.4-97.0)	746	57.6 (53.3-61.8)	<0.001
Arequipa	323	1.2 (0.8-1.6)	129	40.4 (33.5-47.8)	
Cusco	185	0.4 (0.3-0.5)	106	57.1 (48.1-65.7)	
Trujillo	313	2.1 (1.5-2.7)	159	51.3 (45.3-57.3)	
Tumbes	72	0.2 (0.1-0.2)	32	45.1 (30.2-61.0)	
Chronic disease					
No	1691	78.6 (75.3-81.8)	966	59.8 (55.5-63.9)	0.004
Yes	453	21.4 (18.2-24.7)	206	48.0 (40.2-55.9)	
Overcrowding					
No	1875	87.8 (85.1-90.6)	1034	57.8 (53.5-62.0)	0.416
Yes	269	12.2 (9.4-14.9)	138	53.1 (40.0-63.9)	
Disability					
No	2089	97.0 (95.9-98.1)	1149	57.4 (53.3-61.4)	0.539
Yes	55	3.0 (1.9-4.1)	23	51.8 (34.3-69.0)	
Health insurance					
No insurance	2000	93.3 (91.5-95.2)	1131	59.1 (54.9-63.3)	<0.001
SIS	64	3.0 (1.8-4.1)	9	15.5 (7.0-31.0)	
EsSalud	56	2.4 (1.5-3.3)	22	42.1 (27.3-58.4)	
Private insurance	24	1.3 (0.5-2.1)	10	42.7 (19.2-70.0)	
Ethnic self-identification					
Non native	1987	93.3 (91.5-95.2)	1076	56.6 (52.4-60.7)	0.105
Of African descent or native	157	6.7 (4.8-8.5)	96	66.4 (54.4-76.5)	
Number of months since arrival in Peru, medium (SD)					
	8 (7.0)	9.4 (8.9-10.0)	8.1 (6.1)	8.7 (8.1-9.2)	0.001

SD: standard deviation; SIS: Seguro Integral de Salud; EsSalud: Peruvian Social Security

* Number and weighted proportion for each category of characteristics included

† Expansion factor and sample specifications for ENPOVE 2018 were included

‡ Statistical significance obtained through the chi-square test or the adjusted Wald test

Table 2. Factors associated with the non-use of health care institutions by Venezuelan adults with health needs, ENPOVE 2018.

Characteristics	Bivariate model		Adjusted model *	
	PR (95%CI)	p value	aPR (95%CI)	p value
Sex				
Male	Ref.		Ref.	
Female	0.93 (0.83-1.30)	0.153	0.97 (0.87-1.07)	0.527
Age group (years)				
18 to 29	2.65 (1.44-4.87)	0.002	2.35 (1.25-4.44)	0.008
30 to 39	2.54 (1.36-4.74)	0.003	2.26 (1.19-4.28)	0.013
40 to 59	2.71 (1.45-5.07)	0.002	2.43 (1.28-4.60)	0.006
60 to more	Ref.		Ref.	
Educational level				
No education	Ref.		-	
Full elementary	0.92 (0.65-1.30)	0.631	-	
Full secondary	0.86 (0.62-1.19)	0.364	-	
Non-university higher education	1.02 (0.73-1.42)	0.909	-	
University higher education	0.89 (0.63-1.25)	0.502	-	
Marital status				
Single	1.31 (0.98-1.75)	0.070	1.03 (0.78-1.36)	0.821
Cohabitants	1.18 (0.89-1.58)	0.251	0.98 (0.75-1.28)	0.871
Married	1.25 (0.91-1.70)	0.167	1.07 (0.81-1.42)	0.629
Other	Ref.		Ref.	
City of residence				
Metropolitan Lima	Ref.		Ref.	
Arequipa	0.70 (0.58-0.85)	<0.001	0.69 (0.57-0.83)	<0.001
Cusco	0.99 (0.83-1.18)	0.923	0.94 (0.79-1.11)	0.464
Trujillo	0.89 (0.78-1.02)	0.105	0.87 (0.76-0.99)	0.042
Tumbes	0.78 (0.55-1.12)	0.183	0.82 (0.58-1.16)	0.262
Chronic disease				
No	Ref.		Ref.	
Yes	0.80 (0.68-0.95)	0.009	0.83 (0.71-0.97)	0.019
Disability				
No	Ref.		-	
Yes	0.90 (0.64-1.28)	0.563	-	
Overcrowding				
No	Ref.		-	
Yes	0.92 (0.74-1.14)	0.435	-	
Health insurance				
No insurance	Ref.		Ref.	
SIS	0.26 (0.12-0.56)	0.001	0.28 (0.13-0.61)	0.001
EsSalud	0.71 (0.48-1.04)	0.081	0.79 (0.53-1.18)	0.246
Private insurance	0.72 (0.37-1.40)	0.334	0.77 (0.40-1.48)	0.430
Ethnic self-identification				
Non native	Ref.		Ref.	
Of African descent or native	1.17 (0.99-1.40)	0.072	1.11 (0.92-1.34)	0.256
Number of months since arrival in Peru	0.98 (0.97-0.99)	0.001	0.99 (0.98-1.00)	0.023

SIS: Seguro Integral de Salud; EsSalud: Peruvian Social Security; PR: Prevalence Ratio; 95%CI: 95% confidence interval. All analyses included the expansion factor and sample specifications from ENPOVE 2018

* All variables shown in the column with a value of $p < 0.20$ were included in the bivariate model

fact that they have come from a disadvantaged socio-economic background, migrants are in better health than the local population, which, however, tends to become the same as the locals' health or even get worse than theirs due to a greater risk of engaging in risky behaviors, getting unsafe jobs, and economic instability⁽²⁶⁾.

With respect to having health insurance, participation in SIS was associated with a lower probability of NUHCF in Venezuelan immigrants, while it has been reported that in the local population participation in SIS is connected to a higher probability of NUHCF⁽¹⁶⁾. This difference could be explained by the overloading of services in public facilities (where SIS participants have access to care), which discourages their use by the local population, leading to practices such as self-medication or private consultation.

What has been found in connection with the Venezuelan immigrant population differs from what was described by immigrants of other nationalities in 2015 in Peru, when one third had private insurance (only 11% used the SIS) and one half of the general population received health care at least once a year⁽²⁷⁾. Given that migrants are in a disadvantageous economic situation, it is to be expected that having health insurance would be a factor in promoting the use of health services. An important point about migration has to do with the need for health care to cover long-term therapies (for example, antiretroviral therapy)^(28,29). The increased demand for health care can condition the overload of health facilities in the receiving countries, especially in bordering areas, which is why control and prioritization strategies of vulnerable subgroups of immigrants can promote disease control and health preservation among these population groups^(24, 29).

In 2018, Peru and 163 other Governments signed the Global Compact for Safe, Orderly and Regular Migration, the first global agreement between countries of the United Nations, which points to the shared responsibility of States, non-discrimination towards migrants and respect for human rights by addressing the risks and challenges that people and communities experience in the countries of origin, transit and destination⁽¹⁰⁾. This document is in line with the international frameworks for the protection of human rights⁽¹¹⁾.

The health status of migrants is considered a social determinant, separate from other factors, with potential for improvement, which would contribute to improve the status of the population in general⁽³⁰⁾. Therefore, the implementation of strategies by the Peruvian health system to preserve or recover the state of health of the migrant population by meeting their health needs would make it possible to achieve the goals proposed in the vision of the Sustainable

Development Goals, which seek to ensure prosperity for all and that no person is "left behind" with respect to the achievement of their maximum development potential⁽³¹⁾.

This study presents some considerations that could limit the interpretability of the findings. The design of the study does not allow the evaluation of causality between the factors associated to NUHCF given the absence of temporality between the measured variables. Similarly, recording some socio-demographic characteristics and the health status of migrants, like disease or motivation background for migration, would have allowed a more precise analysis. There may also be a memory bias given it is a study of secondary data.

In addition, individual factors, such as the perceived need to seek health care, may vary among individuals and in the same individual depending on the context in which the disease takes place, which could affect the results obtained. In spite of these points, we consider that the findings serve to have an initial view of the health situation of Venezuelan migrants in Peru in terms of the use of health services, which makes it necessary to deepen the study of the health status and its determining factors among this population.

In conclusion, it was found that one out of every two immigrant Venezuelan adults in Peru does not go to health-care institutions for care. The younger migrant population that does not have chronic health problems is more likely not to seek care. Having SIS reduces the non-use of services by this population. However, the percentage of the population that has some kind of health insurance (SIS or other) is low. Venezuelan immigrants in Peru report health needs that require attention at health-care institutions. Since half of this population would not be seeking care, which could affect their productivity and economic well-being, in addition to increasing the demand for health care in case of more serious needs, it is a priority to establish specific strategies for the care and disease control of this population in the context of a high volume immigration.

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