



## Venezuelan migrants and access to contraception in Colombia: A mixed research approach towards understanding patterns of inequality

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### ABSTRACT

**Background:** Migration should not put at risk the achievements of SDG 3: Universal Access to Sexual and Reproductive Healthcare, particularly access to contraceptive methods for Venezuelan migrants in receiving countries such as Colombia. Each year, more than 2 million men and women have access to modern contraceptive methods in Colombia. However, amid the pandemic, disruptions in supply chains, the interruption of essential services for sexual and reproductive health, and social inequalities may jeopardize these gains in contraception among Venezuelan migrants and refugees. The measurement of inequalities focuses on identifying the epicenter of inequity that is particularly relevant within the humanitarian response under strain. The objective of this article is to identify inequalities in access to contraception services among the migrant and refugee populations in six cities that concentrate 70% of the Venezuelan migration into Colombia and to discuss the challenges they represent for future emergencies.

**Methods and findings:** We used a cross-sectional, descriptive study that included a mixed research approach (quantitative and qualitative analyses) based on three activities: i) analysis of contraceptive care records for the period 2018–2019; ii) measurement of inequalities in access to contraceptive services, and iii) design and implementation of twelve focus groups among Venezuelan migrants and refugees for discussion.

**Results:** Despite the evidence of a 70% increase in the use of contraceptive services among Venezuelan migrants between 2018 and 2019, there are absolute and relative inequalities in access to contraceptive methods both in the migrant and refugee populations versus the host population. The inequalities are mainly explained by the demographic dependency rate and the lack of job opportunities.

**Conclusions:** The provision of essential sexual and reproductive health services to migrant and host populations must be regular, continuous, and shielded so that under no circumstances is it interrupted neither for infectious disease outbreaks to climate change emergencies in the future.

### Introduction

As of 2020, 2 million Venezuelan migrants and refugees reside in Colombia, and the country represents the main receiving country in terms of migration (GIFMM 2019). Six main cities concentrate 70% of the migrant population: Bogotá, Cúcuta, Cartagena, Riohacha, Santa Marta and Barranquilla (Departamento Administrativo 2019) and the largest volumes of migrants are between 20 and 34 years old, a population of fertile age and with contraceptive needs.

This is the first time Colombia has been a large-scale recipient of migration, and for this reason, the country has facilitated internal migration, adjusted its policies, organized humanitarian responses, and re-

sponded with immunization programs. But there are still multiple unmet healthcare needs, (Profamilia - OFDA 2020) more specifically, sexual and reproductive health (Profamilia, 2019). In Venezuela, there are no updated numbers on the unmet need for contraceptives. The humanitarian crisis there has led to a shortage of medicines that affect access to contraceptive methods. During 2018, except for condoms, the Index of Scarcity of Contraceptive Methods (IEMA) in five cities in Venezuela was over 75% (MSPS - Profamilia 2020).

Additionally, migration as a social determinant has a differential impact on health and throughout people's lives. Inequalities in the use of contraceptive methods increase during migratory flows, and emer-

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gender contraception can be seriously limited (OIM, 2020). Migrants and refugees face barriers in accessing health services and may find limited availability of contraception at transit and arrival points (OPS, 2020) In the other hand, COVID-19 and measures to control it constitute additional global challenges in humanitarian settings such as migration. Various international agencies have estimated that the consequences of the pandemic will be long-term and will have the worst impact on the sexual and reproductive health needs of women and girls in vulnerable communities.

In Colombia, during the humanitarian crisis due to migration but before the pandemic, measures were implemented to improve access to sexual and reproductive healthcare. The measures adopted include the: i) coordination of a cluster on sexual and reproductive health led by the Pan American Health Organization (PAHO/WHO) and the Ministry of Health and Social Protection (MSPS); ii) implementation of the Minimum Initial Service Package (MISP) in sexual and reproductive health; and iii) preparation of sexual and reproductive health responses focused on migrants and refugees in cities on the Colombia-Venezuela border.

However, there are still multiple unmet needs in access to contraceptive services by the Venezuelan migrant and refugee population, particularly on the Colombia-Venezuela border. In 2018, an assessment of these needs was conducted, which identified access to contraceptive methods as the most unmet and urgent need (Profamilia, 2019). Due to mobility restrictions, these unmet needs and barriers to accessing contraceptive methods may be exacerbated by increased economic barriers (many people lost their jobs at the beginning, during or after quarantine), difficulties in visiting health centers, clinics, or pharmacies, and the impact on contraceptive supply and distribution chains.

For all of the above, it is necessary to understand how Venezuelan migrants access contraceptive methods, including when and where they need them, as well as the dimensions of the underlying inequality that can put them at a disadvantage to access sexual and reproductive health services within the humanitarian response. To achieve this, we must first identify the epicenter of inequality in access by breaking down the available data according to various dimensions of the problem. This is possible through two research approaches: i) analysis of the use of contraceptive services, including needs, barriers, expectations, and experiences in access to health care; as well as universal coverage in sexual and reproductive health in migration contexts; and ii) analysis of inequalities in access to contraception.

Perhaps the most powerful reason that justifies the need to measure inequalities is that there is no other way to act on the social determinants of health than to fight against inequalities, and to fight against these, it is necessary to identify, understand and explain them. (Mujica, 2013) Inequalities are the unjust differences that people from different social groups receive in health services, associated with disadvantages such as poverty, barriers to access services and/or discrimination, and migration or displacement itself (Ministerio de Salud y Protección Social MSPS 2014).

Fortunately, Colombia has excellent information on the health of Venezuelan migrants and refugees. In particular, it has gathered information on the use of health services and epidemiological surveillance in public health. In 2017, the system of individual registration of health services (RIPS) for migrants and refugees was strengthened, and this offers opportunities to implement research on health services within the humanitarian response. RIPS provide migrant patient-level data on utilization and access to healthcare services nationally. This data is routinely collected by healthcare providers and reported through the National Information System for Social Protection (SISPRO) in Colombia. This study used of existing data resources created by the government collecting migrant population health data. Consequently, this database allows us to identify the most common inequalities, barriers and experiences in access to contraception for the Venezuelan migrant and refugee population and to seek appropriate remedies within the continuing pandemic period.

The research question of this research starts from the fact that, taking into account that access to contraception has increased in cities with high migratory flows and the existence of inequalities in access to contraception among the Colombian recipient population, what are the size of these inequalities in contraception in the Venezuelan migrant and refugee population in Colombia?

To answer this research question, the following general objective was defined: Identify the most common inequalities, barriers, and experiences in access to contraception of the Venezuelan migrant and refugee population in Colombia. In turn, this objective was answered by implementing three specific objectives: i) To describe the use of contraceptive services; iii) To measure inequalities in access to contraception; and iii) To identify needs, barriers, and circumstances in the use of contraceptive services within the humanitarian response.

## Material and methods

### Study design

This is a descriptive cross-sectional study using a mixed research methodology to take advantage of different sources of information. The research is focused on six cities that concentrate 70% of the Venezuelan migrant and refugee population in Colombia: Barranquilla, Bogotá, Cartagena, Cúcuta, Riohacha, and Santa Marta. It combined the use of three tools described below. The quantitative research approach was made possible by two analyses: the use of contraceptive services and the measurement of inequalities in access to contraception.

### Analysis of the use of contraception services

The data on the demand for services related to contraception methods were obtained from the Individual Registry of Service Provision (RIPS) for the Colombian population and Circular Cube 029 for the Venezuelan migrant and refugee population. Both information cubes provide data on the supply and access to health services. This source of information is managed by the Data Warehouse of the Social Protection Information System (SISPRO) of the Ministry of Health and Social Protection. Period of consultation: January 1, 2018, to September 30, 2019. Below are the CIE X codes with full names used in the consultations (Table 1).

### Measurement of inequalities

We used three types of data for the analysis of inequalities (Table 2). I) Health Outcome Data: Number of people served by contraceptive services, this includes data on all contraceptive methods available to men and women. II) Population data: number of people over 18 years of age obtained from the latest Colombia Migration reports and the 2018 National Population and Housing Census (CNPV) (Departamento Administrativo 2019; Migración Colombia 2019). III) Data on social dimensions as stratifiers of equity: percentage of unemployed people, percentage of people with primary education or less, percentage of people with barriers in health services, and demographic dependency rate. These data were obtained from the 2018 National Population and Housing Census.

The corresponding numerator for the migrant population was generated from the RIPS Cube - MSPS Circular 029 and for the RIPS-SISPRO host community. The denominators for the migrant and refugee population were calculated from the reports of Migración Colombia, and for the host community from the 2018 Census (Departamento Administrativo 2019; Migración Colombia 2019). Both denominators preserved the age structure of the two populations.

Secondly, we considered the following measures of inequality: the Slope Inequality Index, the Relative Inequality Index, and the Concentration Index (Table 3).

It is important to clarify that absolute measures allowed us to understand the magnitude of inequality, while relative measures allowed us

**Table 1**  
Indicators and ICD X codes are used in the quantitative analysis of information.

Indicator	Numerator	Denominator	ICD X Code
<b>Percentage (%) of people who consulted for contraception</b>	Number of people over 18 years of age served by the ICD X codes related to contraception	Total population over 18 years of age	Z30 - Z39
<b>Contraceptive care rate per 1000 people</b>	Number of people over 18 years of age served for contraception		NA

Source: Research Direction, Profamilia, 2020.

**Table 2**  
Data panel for the analysis of inequalities in contraception in migrants and refugees and the host population in six cities with the high migratory flow in Colombia.

Cities	Rate of people with contraception services (per 1,000)	Demographic dependency rate	Percentage of unemployed people	Percentage of people with primary education or less	Percentage of people with barriers to care in health	Population
<b>Venezuelan Migrant and refugee population</b>						
Barranquilla	25,9	47,6	65,3	26,3	51,2	80,081
Bogotá, D.C.	24,0	28,6	59,7	14,7	51,1	281,696
Cartagena	53,9	59,1	69,9	28,1	47,2	41,272
Riohacha	34,9	56	66,3	33,2	50,8	44,547
Santa Marta	26,3	47,8	66	26,3	47,8	33,967
Cúcuta	40,1	57,2	67,1	31,7	46,8	79,843
<b>Colombian Host Population</b>						
Barranquilla	71,1	46,5	57,3	26,3	1,9	819,332
Bogotá, D.C.	62,9	37,8	48,2	23,5	2,7	5,034,615
Cartagena	91,9	47,5	62,0	28,2	3,2	660,892
Riohacha	102,9	60,7	62,7	41,4	2,7	127,699
Santa Marta	105,4	48,3	60,4	28,8	2,1	339,051
Cúcuta	59,4	31,2	57,7	36,2	2,4	483,397

Source: Own elaboration based on data from the National Population and Housing Census (CNPV) National Administrative Department of Statistics (DANE). Green color denotes the lowest values among the cities; yellow color denotes the highest values among the analyzed cities.

**Table 3**  
Measures of inequality estimated during the investigation.

Item	Measure	Description
1	Slope Inequality Index (SII):	It assumes a linear relationship between the health indicator and the inequality dimension (socioeconomic variable) to show a health gradient across multiple groups with a natural order. It is an absolute measure that allows quantifying the inequality between the cities with the worst social indicator (e.g., less work, less education, more barriers in health care, greater demographic dependence), regarding the cities with the best indicator based on the same indicators. Negative values indicate that absolute inequality is present in the cities with the worst social indicators and vice versa.
2	Relative Inequality Index (RII)	It takes into account the size of the population and the cumulative relative socioeconomic position of the groups. It is obtained by regressing any health indicator (in this case the contraceptive prevalence rate) of the socioeconomic groups on a specific measure of their relative positions: for example, percentage of unemployed people and percentage of people with barriers to access to health services. This measure allows the population to be ordered according to a social hierarchy. A high value implies large differences in the attention to contraception between the upper and lower positions in the hierarchy defined by the inequality dimension (social dimension). It should be interpreted with values in the range 1–0, where values are divided rather than subtracted; an IRR value greater than 1 represents more pronounced inequalities among the most disadvantaged groups.
3	Concentration Index (CI)	This relative measure should be interpreted with a range between -1 and 1, and corresponds to the area between the equity line and the inequality curve. Thus, if the concentration curve coincides with the diagonal, all cities would have the same level of health care. If the curve is below the diagonal, it means that health inequality is concentrated in the population with a higher socioeconomic level and the value of the index is positive, and if the curve is above the diagonal, it means that health inequality is concentrated in people with a lower socioeconomic level and in this case the index is negative. The further the curve is from the diagonal, the greater the degree of health inequality.

Source: Research Direction, Profamilia Association, 2020.

to understand the concentration of inequality. The Epidat 4.2 Library for Measuring Health Inequalities was used. This software was developed by the Pan American Health Organization (PAHO-WHO) and the Universidad CES of Colombia and is free to use (Organización Panamericana, 2016).

The qualitative research approach was made possible through the application of focus groups with Venezuelan migrants.

*Focus group discussions*

We designed, validated, and applied an instrument to investigate health needs, barriers in access to health care, universal health coverage, and outcomes, experiences, and expectations. The focus groups allowed for a more in-depth interpretation of the realities of the Venezuelan migrant population when using health services. The pilot test of the instrument was carried out in the municipality of Soacha (Cundinamarca) on November 6, 2019, with two groups of Venezuelan migrants (13 women and 12 men). The average duration of the discussion was two hours and thirty minutes.

The instrument was applied to participants from all groups of discussion until no new themes emerged from the discussions. The saturation point in this study was reached at a total of 12 focus groups discussions between November 19 and 29, 2019, two groups per city according to gender. Participants were over 18 years of age. A total of 153 people participated (men  $n = 79$  and women  $n = 74$ ). To safeguard the confidentiality of the information, we applied an informed consent with the participants that allowed the freedom of the study at any time and guaranteed the confidentiality of the information. This research did not have any risk or economic benefit for the participants.

The analysis was followed the key themes applied in the instrument. Some categories were set following the domains of healthcare services (access and equity), and others emerged during analysis based on grounded theory: needs, circumstances, expectations, and opportunities in the use of contraception services. After researchers selected the main categories, one qualitative researcher coded the focus group's information and identified emerging categories.

The information from each focus group was subsequently recorded and transcribed, coded, and analyzed using the N-Vivo software (Software Shop 2020). The same categories used in the instrument were considered for the analysis. The participants in the focus groups were summoned through the humanitarian care network of the cities that covered shelters, health care posts, comprehensive care centers for the migrant population, and Profamilia clinics. Data triangulation was performed to complement the findings from different sources according to the needs, circumstances, expectations, and opportunities in the use of contraception services.

*Ethical considerations*

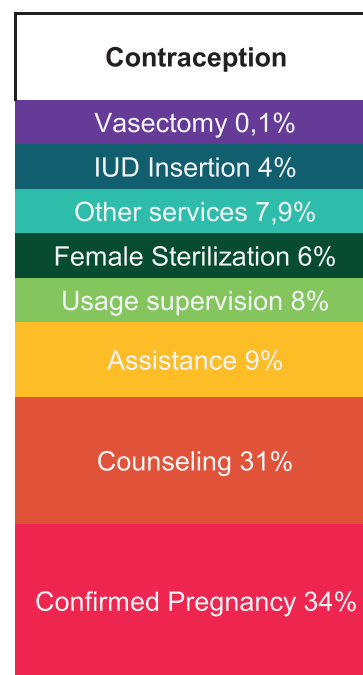
This research was approved by the Profamilia Research Ethics Committee (CEIP) on October 22, 2019, through the CEIP-2019-19 document.

**Results**

First, we estimate the rate of people treated for contraception from the quotient between the number of people over 18 years old seen for contraception and the total population over 18 years of age per 1000 people. The results are structured as follows: (i) use of contraceptive services; (ii) inequalities in access to contraception; and (iii) needs, barriers, and circumstances in the use of contraceptive services among Venezuelan migrants and refugees in Colombia.

*Use of services*

In 2019, 1.8 million contraceptive services were delivered in the country. These included 46 thousand and 1.7 million services for



**Graph. 1.** The proportion of contraceptive use among Venezuelan migrants and refugees in Colombia, 2019.

Source: Elaborated from the Cube Individual Record of Service Delivery (RIPS) - Migrant Social Protection Information System (SISPRO). Ministry of Health and Social Protection (MSPS) of Colombia. The consultation was held on November 30, 2019.

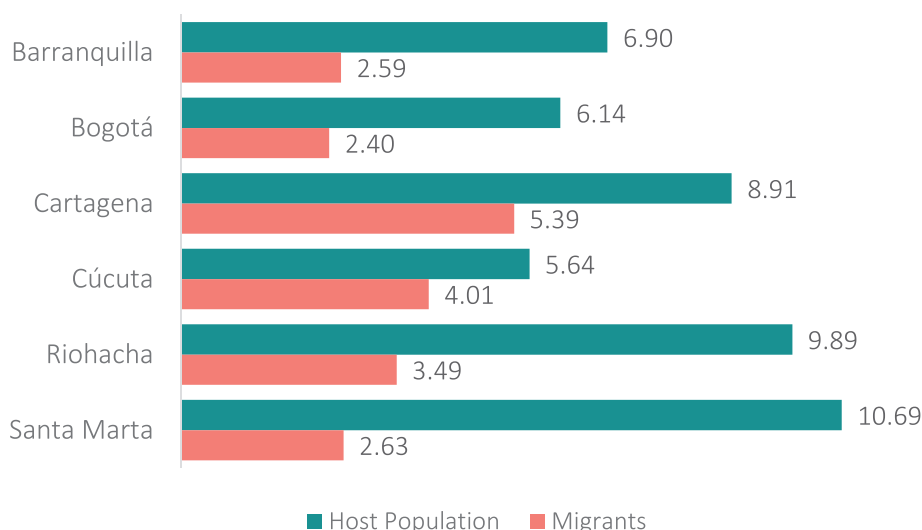
Venezuelan migrants and Colombians in host communities, respectively. We found a 96% increase in the use of health services for contraception by the Venezuelan migrant and refugee population compared to 2018. An increase from 23,764 to 46,675 people received at least one related service. The services in greatest demand among Venezuelan migrants and refugees ranged from a vasectomy and intrauterine device (IUD) insertion to contraceptive counseling, method counseling, and pregnancy test confirmation (Graph 1).

Overall, 14,534 migrants and refugees accessed contraceptive services in the six cities (i.e., a 69.7% increase in comparison with 2018). Cartagena, Cúcuta, and Riohacha (cities located in the Colombia-Venezuela border) provided a higher number of contraceptive services to the Venezuelan migrants and refugees. In the other hand, Santa Marta, Riohacha, and Cartagena reported the highest number of contraceptive services provided to the host population (Graph 2).

In the six cities analyzed, both in the Venezuelan migrants and Colombians populations in the host communities, women are the ones who attend most to contraceptive services. Mainly in Bogotá, Cúcuta, and Barranquilla, is registered the highest number of Venezuelan migrant and refugee women cared for, while in Bogotá, Barranquilla, and Cartagena there is the highest number of women from the host community. There a substantial difference by gender: despite that the number of Venezuelan migrant and refugee men who went for vasectomies in the cities increased from 102 in 2018 to 165 in 2019, the 98.8% of contraceptive services were received by migrant women.

*Inequalities in the use of contraceptive services*

We evidenced the existence of absolute and relative inequalities in the use of contraceptive services among the total of the six cities (Table 4). In both populations, the existence of absolute and relative inequalities was mainly explained by the contribution of the demographic dependency rate and the percentage of non-working people, particularly among the host population. A negative IDP (-28.9) in cities with



**Graph. 2.** Percentage of people attended for contraception in the Venezuelan migrant population and host community in six cities that concentrate 70% of Venezuelan migration in Colombia 2019.

Source: Elaborated from information from Migración Colombia; Individual Registry of Provision of Services (RIPS) - Migrant Population. Social Protection Information System (SISPRO) Ministry of Health and Social Protection (MSPS) of Colombia. The consultation was made on November 30, 2019.

**Table 4**

Absolute and relative inequalities in contraception among Venezuelan migrants and refugees and the host community among the total of six cities with high migration flow in Colombia, 2020.

Stratifiers	Slope Inequality Index	Relative Index of Inequality	Concentration Index	Teriles		
				T1 (best condition)	T2	T3 (worst condition)
<b>Migrant and refugee population</b>						
Demographic dependency rate	-28,9	2,8	-0,1	44,8	31,1	24,4
Percentage of unemployed people	-28,9	2,8	-0,1	24,4	31,1	44,8
Percentage of people with primary school or less	-24,5	2,4	-0,1	24,2	35,4	38,2
Percentage of people with barriers to care	24,4	1,5	0,1	24,4	31,1	44,8
<b>Host Community</b>						
Demographic dependency rate	-45,2	1,9	-0,059	104,6	80,3	62,5
Percentage of unemployed people	-40,1	1,8	-0,067	93,6	78,3	64
Percentage of people with primary school or less	-29,4	1,5	-0,059	68,4	96,4	64
Percentage of people with barriers to care	0,9	1	0,002	66,2	68,4	81,1

Source: Elaboration from statistics in Epidat and R.

a smaller population of economically active age and with higher unemployment means that for every 1000 people over 18 years of age, 29 people are being excluded from contraceptive services based on this dimension. While in the host population this absolute inequality is greater: 45.2 and 40.1 respectively. On the other hand, a smaller IDP (0.9) means that people are accessing contraceptive health services in some way without many socioeconomic differences.

It is important to clarify that cities with the greatest barriers to accessing contraception services, on the contrary, have the highest number of people treated for contraception (Table 4).

In general, the relative inequalities explained by the IRD show that the cities with lower dependency rates and larger populations with jobs have a rate of people served that is 2.8 times higher than those cities with smaller populations of productive age and without a job. Disaggregating the data, the cities with the highest percentage of primary education or more among Venezuelan migrants and refugees have a rate that is 2.4 times higher compared to migrants and refugees with lower levels of education.

On the other hand, the lower relative inequality was explained by the percentage of barriers in access to services that have 1.5 times the rate of people served by contraception. In general, in the analysis of inequalities through the IRD, it was found that the cities with the lowest dependency rate and the largest working population have a 1.9 times higher rate of people served than those cities with a smaller population of productive age and without a job. Cities with the highest number of Venezuelan migrants and the highest percentage of primary education or more among the host community reported a rate

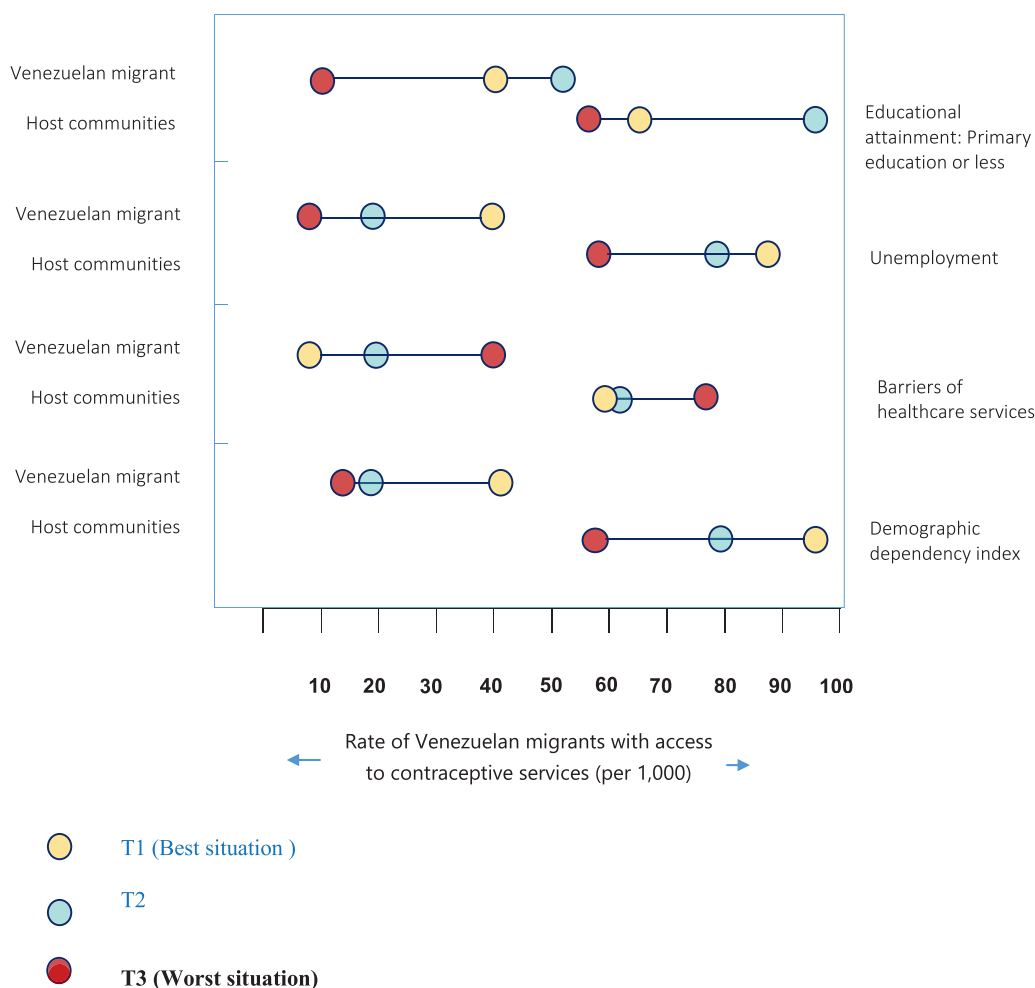
of 1.8 times higher than cities with lower educational levels. It is important to note that barriers to access to health services did not explain inequalities in contraceptive services among Colombians in host communities, but did explain them among Venezuelan migrants and refugees.

Finally, the Concentration Index (CI) for the stratified variables was approximately zero. This is explained as a smaller inequality while indicating that the CI detects slight inequality in the host community compared to the Venezuelan migrant population within the cities analyzed. In terms of the sense of inequality, we see that it is present in the cities with the lowest demographic dependency rate, percentage of people who do not work, and lower percentage of people with primary education or less, a result similar to what was found with the Venezuelan migrant population within the cities analyzed.

An equiplot is a way of graphing the patterns of absolute and relative inequalities. A sequence of colored dots (representing each tertile as 33.33% of the total cities) that are connected by a horizontal line (representing the inequality) of the most extreme values between tertiles. Shorter lines show smaller absolute or smaller inequalities between subgroups (more equitable situation); conversely, longer lines indicate larger inequalities (more inequitable situation).

To facilitate a better understanding of the size of the inequalities explained above, Graph 3 illustrates these inequalities in contraceptive services in the Venezuelan migrant and refugee population and host communities according to the social dimensions analyzed.

Both populations were distributed by tertiles (three subgroups of cities organized according to socioeconomic level). This segmentation



**Graph 3.** Inequalities in Contraceptive Services among Venezuelan Migrants and Refugees and Host Communities, by Social Dimension in Colombia, 2020. Source: Elaboration from the data panel constructed from the National Census of Population and Housing (CNPV) National Administrative Department of Statistics (DANE) and the Individual Registry of Service Provision RIPS Cube of the Data Warehouse of the Sispro-MSPS. Graph elaborated from R. Blue dot represents 33% of the population with the best social situation; fuchsia dot represents 33% of the population with a medium social position; and the green dot represents 33% of the population with the lowest social position.

was done to simplify the interpretation of inequalities and easily communicate to non-technical audiences. The use of tertiles (or deciles or quintiles as chosen) allows for much more disaggregation of the data and identification of where the epicenter of inequality lies. Tertile 1 (Q1) represents 33.33% of the cities with the best social position according to socioeconomic level (less unemployment, fewer health barriers, more education); while Tertile 3 (Q3) represents 33.33% of the cities with the worst social position according to socioeconomic level.

A comparison of inequalities between the migrant and refugee populations and the host community shows that 33.3% of Venezuelan migrants in the cities with the highest percentage of people with primary education or less (Q3) have the lowest rate of people served. Among the host communities, 66.6% of the cities with the highest and lowest educational levels (Q1 and Q3) have lower rates of people served than the rest of the cities.

However, it is important to note that 33% of the host population with the highest percentage of barriers has the highest rate of contraceptive care. The percentage of non-working people among the migrant population and the community has approximately the same structure in inequality by Tertiles, that is, the lack of employment opportunities in both populations explains the inequality of access to health services in contraception.

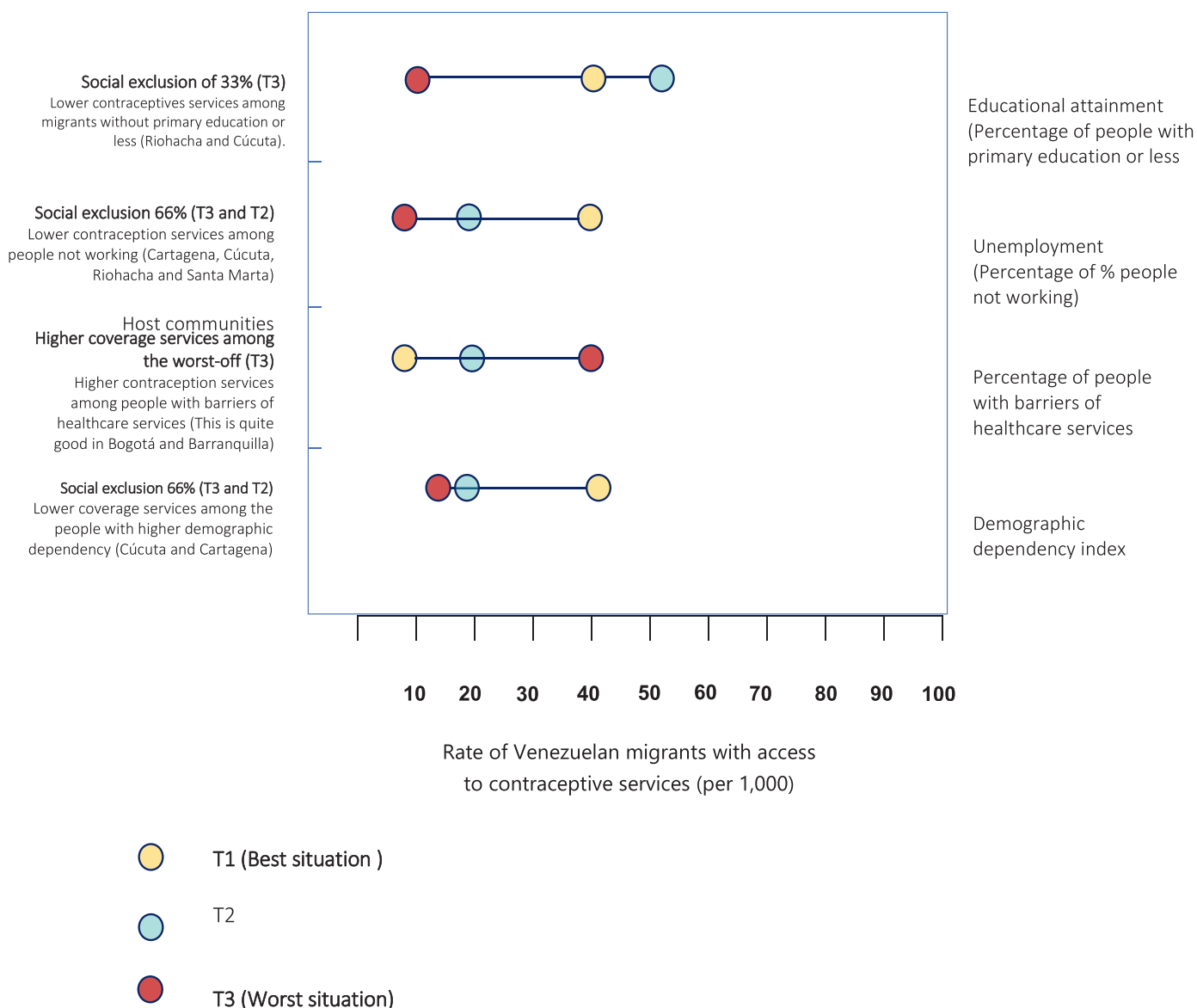
A similar structure was also found for the demographic dependency rate in Tertiles for both populations. Again, it is evident that 33.3%

of the cities with the largest populations of reproductive age are having greater access to health services for contraception and therefore a higher rate per 1000 people served.

Graph 4 illustrates the patterns of inequality in contraception among the Venezuelan migrant and refugee population in Colombia. Similarly, we show a pattern of inequality of social exclusion in contraceptive services present in the 33% of migrants and refugees with primary education or less (T3=Riohacha and Cúcuta), who do not work (T3=Cartagena and Cúcuta) and with the highest economic dependence (T3=Cartagena and Cúcuta). It is also important to note that the greater inequality in contraception among migrants and refugees is explained by the educational attainment of primary school or less. Cartagena and Cúcuta (Q1) have the lowest percentage of barriers in access to health services but the lowest rate of contraceptive services.

*Unsatisfied needs and expectations*

Using the qualitative research approach, it was possible to explore in greater depth the health needs, perceptions, experiences, and barriers in contraceptive services of Venezuelan migrant and refugee men and women. Investigating the use of contraceptive services, allowed us to know common and little documented situations in the Colombian context that put people at a disadvantage or increase the vulnerability of being excluded from contraception services. These dialogues allowed



**Graph. 4.** Patterns of Inequality in Contraceptive Services among Venezuelan Migrants and Refugees in Colombia, 2020.

Source: Elaboration from the data panel constructed from the National Census of Population and Housing (CNPV) National Administrative Department of Statistics (DANE) and the Individual Registry of Service Provision RIPS Cube of the Data Warehouse of the Sispro-MSPS. Chart elaborated from R. Blue dot represents 33% of the population with the best social situation; fuchsia dot represents 33% of the population with a medium social position; and the green dot represents 33% of the population with the lowest social position.

us to collect essential information that can help guide the design and adaptation of health system responses and humanitarian response at local and territorial levels.

"There was a time in Venezuela when contraceptives were in short supply. I tell you there was a time because (...) when Cuban doctors went to Venezuela, they were good with their consulting services and they gave away contraceptive pills and condoms, pharmacies also sold pills with prescriptions by your gynecologist. But there was a time when there weren't contraceptive pills, nor Cuban doctors, nor anything."

(Focus Group with Venezuelan migrant and refugee women at Cartagena)

Table 5 describes the needs, circumstances, expectations, and opportunities for contraceptive use among the migrant and refugee populations in Colombia. The circumstances described mainly refer to those resulting from age (adolescents and youth), immigration status (migrant without a residence permit), gender identity, level of education, among others. The expectations and opportunities refer to ac-

tions that appear to be unresolved within the humanitarian response, both from the perspective of the migrant and the situation that can be improved from the perspective of the local and national health system.

Among the experiences with the use of contraceptive services, the following stand out: out-of-pocket expenses to access specific services, discrimination in health services, waiting times, and lack of information. On the other hand, they highlighted positive aspects that should be maintained and were considered essential: dignified treatment, availability of supplies and services, and good care received by public health institutions and humanitarian agencies. However, migrants also focused on negative stories related to access to contraceptive services, which allow us to interpret the situation from another angle and understand the expectations of the migrant population such as the availability of services and coverage in access to health, improving communication, ensuring continuity of care, and increasing trust with health service providers.

**Table 5**  
Needs, Circumstances, Expectations, and Opportunities in the Use of Contraception Services of the Migrant and Refugee Population in Colombia, 2020.

Needs	Circumstances
<p>Contraception with modern reversible, long term and emergency methods at all levels (emergency, outpatient, extramural actions).</p> <p>Adherence and access to cost-effective contraceptive services and free of discrimination</p> <p>Quality information and comprehensive sex education.</p>	<p>Irregular adolescents and youth without support networks</p> <p>People with disabilities, non-binary and indigenous people</p> <p>Sex workers, victims of sexual violence and/or sexual exploitation</p> <p>Adolescents who have initiated their sexual life</p> <p>Teenagers in a state of pregnancy.</p> <p>Teenagers in abandonment or family breakdown, without support networks</p> <p>Adolescent victims of different types of violence.</p> <p>Adolescents and young people in labor exploitation.</p> <p>Women and girl victims of sexual exploitation or sexual violence.</p> <p>Women and men sex workers.</p>
<p><b>Expectations</b></p> <p>Receive high quality information on how to secure the General System of Social Security in health and the right to health</p> <p>Receive information without discrimination and free of stigma.</p> <p>Achieve insurance to the health system quickly and effectively.</p> <p>To find contraceptive methods easily, without barriers and according to their sexual and reproductive health needs.</p>	<p><b>Opportunities for attention focused on the expectations of migrants and refugees</b></p> <p>Generate key information on guidelines and mechanisms for membership and avoid excessive bureaucracy.</p> <p>Ensure that health system staff provide transparent, non-stigmatizing, and sensitive information.</p> <p>Make the most of the first contact with migrants seeking information on methods and provide them during that first contact in a timely and effective manner.</p> <p>Improve the supply chain of contraception methods so that its services are regular and continuous without risks of being interrupted even in the most difficult situations within the humanitarian response.</p>

Source: Elaboration from information triangulation.

"- But these contraceptive methods, yes, I have found that they give these at San Pedro (hospital), that is where I get vaccination (...).

- I am paying at a pharmacy for her trimestral injection (...) I am paying for that".

(Focus group of venezuelan migrant and refugee men at Bogota).

## Discussion

This study described access to contraceptive methods, identified patterns of inequality, and documented Venezuelan migrants' experiences using contraceptive services in Colombia.

At the access to contraceptive services level, although 60% of the migrant population is young adults, access to different methods of contraception continues to be low in coverage and inequitable. This means that the supply of contraceptive services is not reaching the Venezuelan migrants who need it the most, where they need it, and when they need it. A rational explanation for this is that undocumented migrants or those in transit are in some circumstances excluded from local responses to the humanitarian emergency due to legal barriers such as an authorized permit, vocation of residence, or other complex situations of migration itself. On the other hand, it is worth noting that in the six cities analyzed, both in the Venezuelan and Colombian migrant populations in the host communities, women are the ones who attend most to contraceptive services.

At the patterns of inequality in access to contraception level, it was possible to analyze the contribution of five social dimensions as stratifiers of equity: percentage of people who do not work, percentage of people with primary education or less, percentage of people with barriers in health services, and demographic dependency rate. The existence of both absolute and relative inequalities in access to contraception among Venezuelan and Colombian migrants is explained mainly by the demographic dependency rate and the lack of job opportunities. However, perhaps one of the most outstanding findings involves the greatest contribution in explaining inequalities in access to contraception and is related to the demographic dependence of Venezuelan migrants. One possible explanation may be that cities with a larger population of children or the elderly increase the burden for economically active people who financially support their families, prioritizing their care over the unmet need for contraception.

At the level of experiences and expectations in access to contraceptive services', Venezuelan migrants and refugees have problems related to health insurance coverage, provision of primary health care services, as well as limited financial protection mechanisms, and avoidance of

out-of-pocket expenses that could become critical during the pandemic and measures to control it. In practice, these problems range from unnecessary procedures to enforce their right to health care even with their immigration status regularized, to unfair barriers due to the subjective and ambiguous interpretation of their right to health and out-of-pocket expenses to cover photocopies of documents to access the same contraceptive services. This can eventually impoverish them simply by using health services. This represents the excessive bureaucracy to navigate the Colombian health system, which is characterized by a market of multiple actors, roles, and rules that interact within a system with deficient control and surveillance.

The findings of this study contrast with previous evidence describing low proportions of access to contraception among migrants in Sweden and Uganda compared to resident populations (Emtell Iwarsson et al., 2019; Larsson et al., 2016; Bwambale et al., 2020). The unmet sexual and reproductive health needs of Venezuelan migrants in Colombia have been well documented (Profamilia - OFDA 2020; Profamilia, 2019), although studies using mixed research approaches to explain inequalities in access to contraception among Venezuelan migrants and their experiences with the health system within the humanitarian response are limited.

This study also has important limitations that should be considered. First, the panel of data and analysis carried out did not disaggregate and control the results by modern methods, age groups, and types of migration, which may be hiding significant differences in access to contraceptive services. Second, the Colombian health system has proposed to ensure basic health care for the Venezuelan migrant population. However, in practice, there are still multiple difficulties that have to do with the complex functioning of the health system, the lack of appropriation of the legal framework in health to attend the migrant and refugee population, the high migratory flows that affect geographical areas with high unsatisfied needs and social exclusion, the availability of health services as well as prejudice and discrimination. This offers an opportunity to rethink local health system preparedness and response to the contraceptive needs of the migrant and refugee population and the host community itself within the humanitarian emergency. This is possible by strengthening strategies that guarantee universal coverage of sexual



and reproductive health needs without differentiating the nationality of individuals.

On the other hand, it is also important to mention that although access to modern contraceptive methods in Colombia is still low in coverage and inequitable, it has been increasing in the number of people who effectively access them, as well as the number of migrants who have their needs met, especially Venezuelan girls and women. These achievements in the humanitarian response may be at risk during the COVID-19 pandemic due to the interruption of essential contraceptive services, delivery of dignity kits, access to emergency contraception, etc. The inequity in access to contraception evident in this study and the direct and indirect impact of COVID-19, on sexual and reproductive health, coupled with the absence of intersectoral policies and structural barriers, may jeopardize achievements in access to contraception, as well as the achievement of ODS-3.4: universal coverage in sexual health, sexual education and access to contraception in migration contexts.

Therefore, during the COVID-19 pandemic, the potential impact on maternal and neonatal deaths, unwanted pregnancies, and unmet need for contraception could be devastating (Navarro and Garcia, 2020). Gaps in access to contraceptive supplies and services during the pandemic have increased for both the migrant and host populations. Disruptions in the supply chains that provide family planning and sexual and reproductive health supplies will have long-term consequences that will especially affect the most vulnerable populations (UNFPA 2020; Beatley, 2020).

Also, due to the increase in unemployment and the fall of the global and national economy, migrants and refugees are experiencing a significant reduction in their monthly income, which implies that expenses cover more urgent needs such as housing and food, leaving aside expenses related to other needs such as contraception. Given this scenario, it is necessary to think about the gaps and barriers in access to contraception from a gender perspective, since as it has developed, migrant and refugee women have had the greatest access to contraceptive services in Colombia. But, in turn, migrant women and girls are the most vulnerable population to suffer affectations in their sexual and reproductive health during the COVID-19 pandemic (Bwambale et al., 2020; Navarro and Garcia, 2020; Beatley, 2020; Demayo et al., 2020). There is an increased need for access to preventive and emergency contraceptive methods for women and girls, especially those in vulnerable conditions (Hussein, 2020). This also implies considering the migrant and refugee population, victims of human trafficking, or those who have resorted to sex work for survival, since due to their life experiences they need special attention in the provision of contraceptive methods and sexual and reproductive health care. Thus, it is essential to recognize that during periods of preventive isolation, economic hardship, xenophobia, and discrimination, difficulty in access to labor, and, therefore, problems to access to health services have increased for this population (ONU MUJERES 2020).

All of the above implies the need for equitable responses to meet these contraceptive needs in migration contexts while taking into account the same needs of the recipient populations. For example, it is necessary to consider programs or local responses to access contraception to prevent unwanted pregnancies and sexually transmitted diseases with a social determinants approach; that is, a program that considers achieving the above by taking into account the intersection of multiple dimensions such as infectious diseases, migration, social exclusion, the burden of care due to high demographic dependency, while considering measures to reduce mobility and social distance during the pandemic.

Based on the evidence generated, the following conclusions and recommendations can be made to health institutions, service providers, institutions involved in the local humanitarian response, government actors, and decision-makers:

First, beyond the provision of new health services, progress must be made in making the right to health and in particular to contraceptive methods compulsory for the migrant and refugee population where and when they need them, particularly within the health emergency for any

circumstance. Therefore, primary health care should be renewed and community-based interventions should be returned to respond to the increased contraceptive needs of migrants and refugees and host communities within the humanitarian response.

Second, the right to any contraceptive method should not be denied based on immigration status or nationality. This should be accompanied by a better definition of primary sexual and reproductive health care models in the face of multiple health needs and emergencies. This requires that regional and local health realities and needs be addressed through models of care at the community, neighborhood, and Venezuelan migrant settlement levels.

Third, despite the achievements in access to contraceptive methods on the Colombia-Venezuela border, the provision of sexual and reproductive health services must remain a priority issue during the COVID-19 response in humanitarian contexts.

Fourth, given the situation resulting from the pandemic, and in the current absence of a vaccine, Information and Communication Technologies (ICTs) should play a relevant role within the humanitarian response, particularly in accessing quality information on contraceptive methods. Mobile health applications and the use of channels enabled via WhatsApp can contribute to meeting expectations and needs on where to easily find and access service offerings, methods available in your municipality, and quality information to prevent STIs and unwanted pregnancies in humanitarian settings.

## Conclusions

The health and rights of migrant and refugee women and the most vulnerable host communities must be placed at the center of budgets of humanitarian emergency and future responses dealing any crisis independently of the cause. For this reason, the provision of essential sexual and reproductive health services to migrant and host populations must be regular, continuous, and shielded so that under no circumstances is it interrupted neither for infectious disease outbreaks to climate change emergencies in the future.

## Contributions from the authors

Juan Carlos Rivillas-García, Ángela Cifuentes-Avellaneda, Johan Sebastián Ariza-Abril, Marcela Sánchez-Molano, and Danny Rivera were in charge of the concept, method, software, validation, formal analysis, investigation, and data analysis. Juan Carlos Rivillas and Danny Rivera were responsible for writing the first draft. Angela Cifuentes and Juan Carlos Rivillas provided a critical review. Juan Carlos Rivillas and Danny Rivera oversaw inputs and manuscript critical reviews. Juan Carlos Rivillas reviewed and edited the full manuscript. The final version of the project reached full consensus.

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## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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