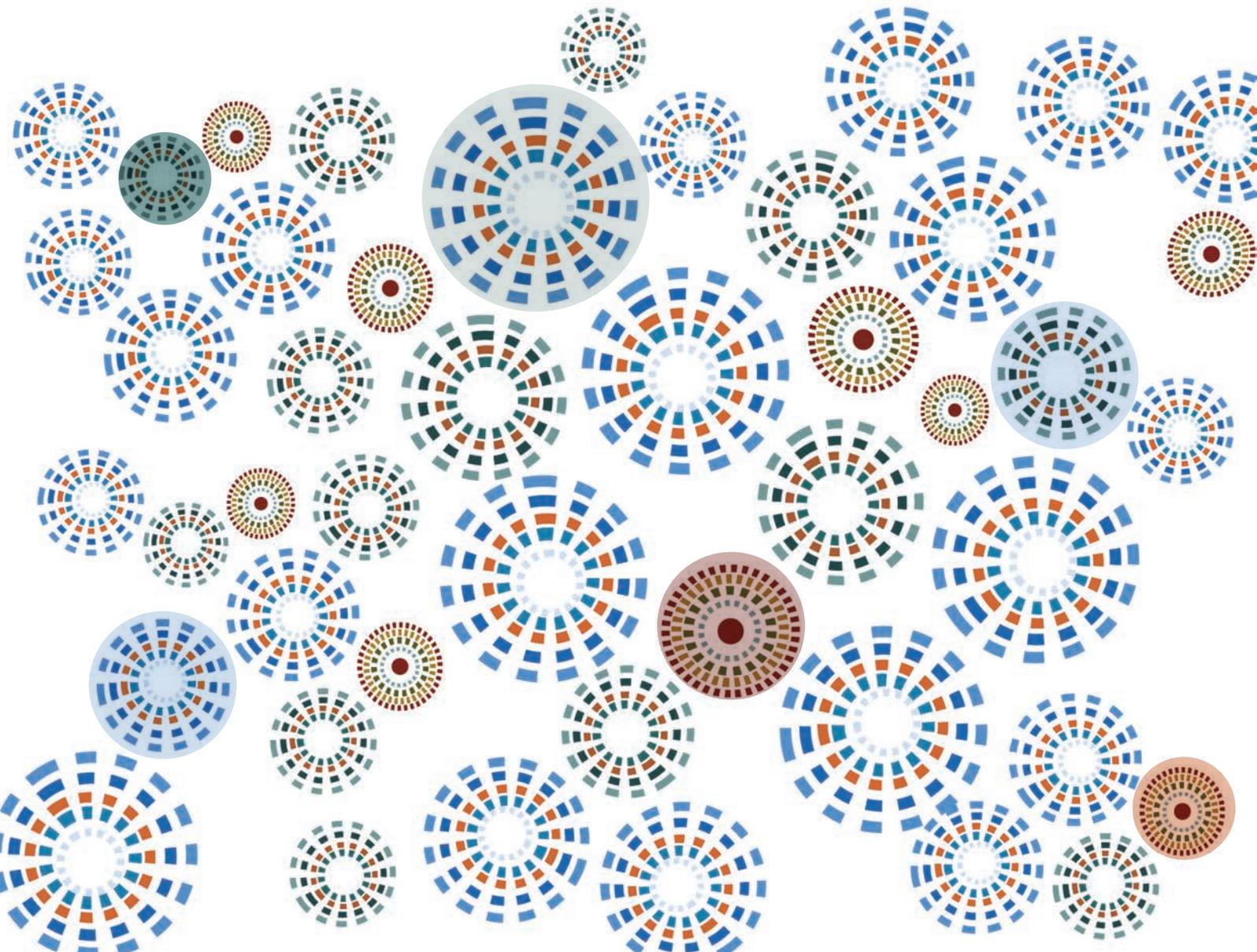


# NARRATIVES AND INFORMATION POLLUTION ON VULNERABLE GROUPS

DURING THE COVID-19 PANDEMIC: PANAMA AND VENEZUELA CASES





# NARRATIVES AND INFORMATION POLLUTION **ON VULNERABLE GROUPS**

**DURING THE COVID-19 PANDEMIC: PANAMA AND VENEZUELA CASES**





**United Nations Development Programme (UNDP)**

**UNDP Oslo Governance Center**

Malin Herwig, Director

**Country Office in Panama**

Aleida Ferreyra, Resident Representative a.i.

**Country Office in Venezuela**

Jan Harfst, Resident Representative

Rosicler Gómez, Deputy Resident Representative

**Design and Layout**

Analiessa Ibarra Mendoza

Copyright © UNDP 2021.

**United Nations Development Programme**

All rights reserved.

# FOREWORD

This report is the result of a joint effort by the UNDP offices in Panama and Venezuela, with the support of the UNDP Oslo Governance Centre and the UNDP Regional Centre for Latin America and the Caribbean. It is a contribution to address one of the greatest challenges of our time, the information pollution during the COVID-19 pandemic.

We would like to highlight three aspects of the report. First, the study focuses on the effects of the pandemic on the most vulnerable. UNDP has as one of its priorities the attention to this population, which has been clearly expressed in the Agenda 2030 call to “leave no one behind”. This work is part of an analysis of the impact of the pandemic on two specific cases: migrants returning to Venezuela and the approach to the issue of gender equality in Panama.

Secondly, the report addresses the issue from the perspective of information pollution in new and unavoidable scenarios, the social networks. In these spaces, public issues are discussed with the participation of diverse and significant actors: governments, the media, NGOs, influencers, scientists, as well as people in general. The debates in these spaces often precede and set the tone for traditional discussion spaces. They have played a crucial role in capturing the perceptions and concerns of the population during the pandemic. Intense debates on vulnerable populations take place in them, which are not exempt from information pollution.

The approach to these new scenarios of debate with innovative methodologies is an expression of UNDP’s permanent effort to update them and to incorporate new tools to approach its work. The monitoring of the networks analyzed in this work was carried out with an emphasis on quantitative methodologies with the clear purpose of supporting the databased decision-making process.

Third, the report goes beyond data analysis. Each case study culminates with a proposal for a communication and capacity building strategy to address the contamination of information on vulnerable groups. These proposals can be used as a reference to address this phenomenon in other populations of interest.



# CONTENT

SUMMARY	11
INTRODUCTION	13
METHODOLOGY	16
<b>PART 1: RETURNED MIGRANTS TO VENEZUELA</b>	<b>18</b>
 <b>Introduction</b>	<b>19</b>
<b>Sources of information</b>	<b>23</b>
Twitter	
Google Trends	
Media	
<b>Communications strategy</b>	<b>46</b>
<b>Conclusions</b>	<b>48</b>
<b>PART 2: WOMEN AND THE LGBTIQ+ COMMUNITY IN PANAMA</b>	<b>50</b>
 <b>Introduction</b>	<b>51</b>
<b>Sources of information</b>	<b>53</b>
Twitter	
Google Trends	
Media	
<b>Communications strategy</b>	<b>68</b>
<b>Conclusions</b>	<b>71</b>
REFERENCES	73



# ABSTRACT

**This report identifies narratives and information pollution on two vulnerable population groups during the COVID-19 pandemic: women and LGBTIQ+ population in Panama and returned migrants in Venezuela. The sources of information used are: Twitter, Google Trends and media during the period March-November 2020.**

**In the case of Venezuela**, the volume of discussion about returned migrants increased substantially during the pandemic, especially the issue of those who return through non-official routes. The source analysed with the largest increase was Twitter. The discussion and stigmatization of the migrants, who return as the main vector of contagion of the virus, alongside with the conspiracy theories about its external origin, play an important role in the narratives and information pollution; and these, also cause a high political polarization when the debate on migrants is concerned.

**In the case of Panama**, there was an increase in the volume of discussion on gender issues in a differentiated manner. “Feminism”, “Abuse”, “Gender-based violence”, “Domestic violence” and “Gender” had significant increases. However, the main narratives detected are not directly related to COVID-19 and its effects. The narratives are framed in the confrontation of conservative and progressive values in the discussion of gender equality, abortion rights and the recognition of gender diversity. The most frequent form of pollution is through unfounded accusations of wrongdoing against opponents.

Disinformation is the dominant type of information pollution in both countries. For each country, a communication strategy is proposed to mitigate the impact of pollution.



# INTRODUCTION

The relationship between crises and vulnerable populations is a widely studied topic in economic and social terms. However, little is known about the crisis-vulnerable groups relationship in terms of the information flows discussed in the media and social networks. In this report, we identify the narratives and information pollution about women and the LGBTIQ+ community in Panama and migrant returnees to Venezuela during the COVID-19 pandemic. The extraordinary importance of social networks and digital media in the world of information and the information explosion around the pandemic, the so-called “infodemic” (PAHO, 2020), (Lancet, 2020), (Arroyo-Sánchez AS, 2020), justify this approach to the subject from the angle of information pollution.

Three sources of information were used in the analysis: Twitter, Google Trends and media with a digital presence, during the period

March-November 2020. In the case of Venezuela, meetings were held with the Venezuelan Border Observatory and representatives of Caritas Venezuela in the towns of San Cristóbal, Machiques and Guasdalito.

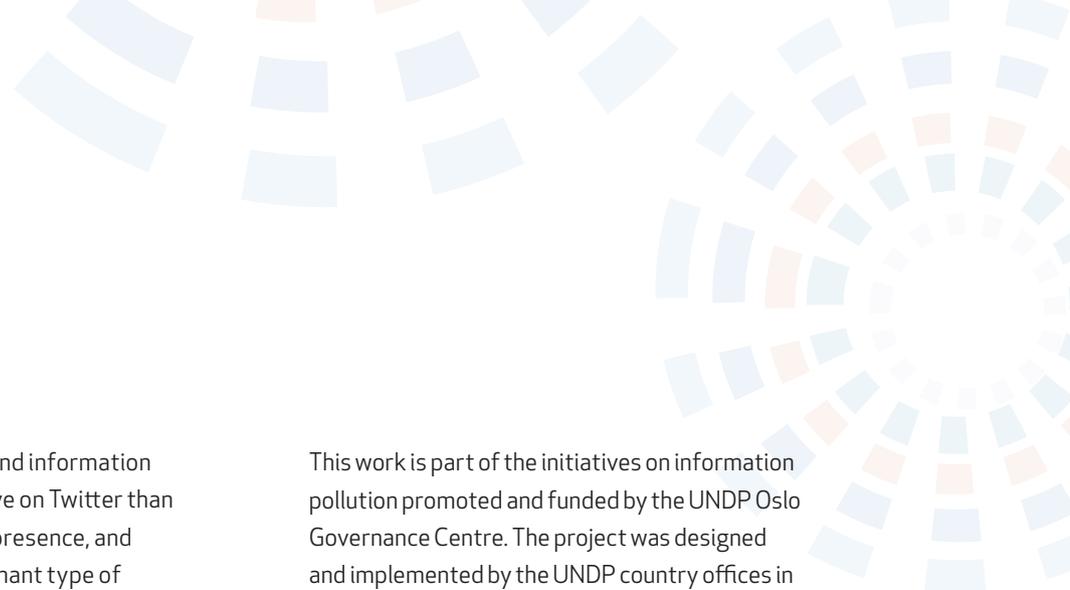
The source analysed in more detail is Twitter and is used as a comparative reference with the other sources. Although Twitter is not a representative sample in the statistical sense, it is a privileged medium for government and social leaders, influencers and the general public to express opinions on matters of public interest. Information and opinion trends on Twitter usually precede those in the media. Tweets are public and can be collected relatively easily. Recently developed techniques of text mining (Gupta, 2009) and community detection (Blondel, 2008) allow for the identification of narratives and information pollution, as well as their propagation patterns.



**Among the main findings of this study for the case of Venezuela**, we found that the volume of discussion in the digital information sources mentioned about returned migrants increased substantially during the pandemic, with the presence of information pollution. Twitter was the source analysed where the increase was greatest. The narratives and information pollution are dominated by the discussion of returning migrants as the main vector of contagion of the virus and conspiracy theories about the external origin of the virus. High political polarisation is closely related to the debate on migrants and is one of the causes of information pollution.



**In the case of Panama**, there was also an increase in the volume of discussion on gender issues in a differentiated manner. "Feminism", "Abuse", "Gender-based violence", "Domestic violence" and "Gender" had significant increases. However, the main narratives detected are not directly related to COVID-19 and its effects. The narratives are framed in the confrontation of conservative and progressive values in the discussion of gender equality, abortion rights and the recognition of gender diversity. The most frequent form of pollution is through unfounded accusations of wrongdoing against opponents



In both countries, debate and information pollution is more aggressive on Twitter than in the media with a digital presence, and disinformation is the dominant type of information pollution. In both countries, the population showed interest in searching the web for information about discussions with information pollution, which shows that not all the population passively accepts it. In both cases, communities of users who do not propagate pollution were detected, showing a careful attitude. For each country, a communication strategy is proposed to mitigate the impact of information pollution.

This work is part of the initiatives on information pollution promoted and funded by the UNDP Oslo Governance Centre. The project was designed and implemented by the UNDP country offices in Panama and Venezuela.

We thank the Recovery Solutions and Human Mobility Team of the UNDP Crisis Bureau - Headquarters for their financial support. The support of Governance Team of the UNDP Regional Center for Latin America and the Caribbean was substantial. Niamh Hanafin's comments during the development of the work were valuable. We also thank Caritas de Venezuela and the Venezuelan Border Observatory for the exchange carried out.

# METHODOLOGY

The methodology used to process the Twitter data is described in the image. The methodology used for the media is similar, except that no user communities are detected. In the case of Google Trends, only the most relevant search terms and their associated metrics were identified.



**Database  
construction**



**Narrative  
identification**



**Pollution  
identification**

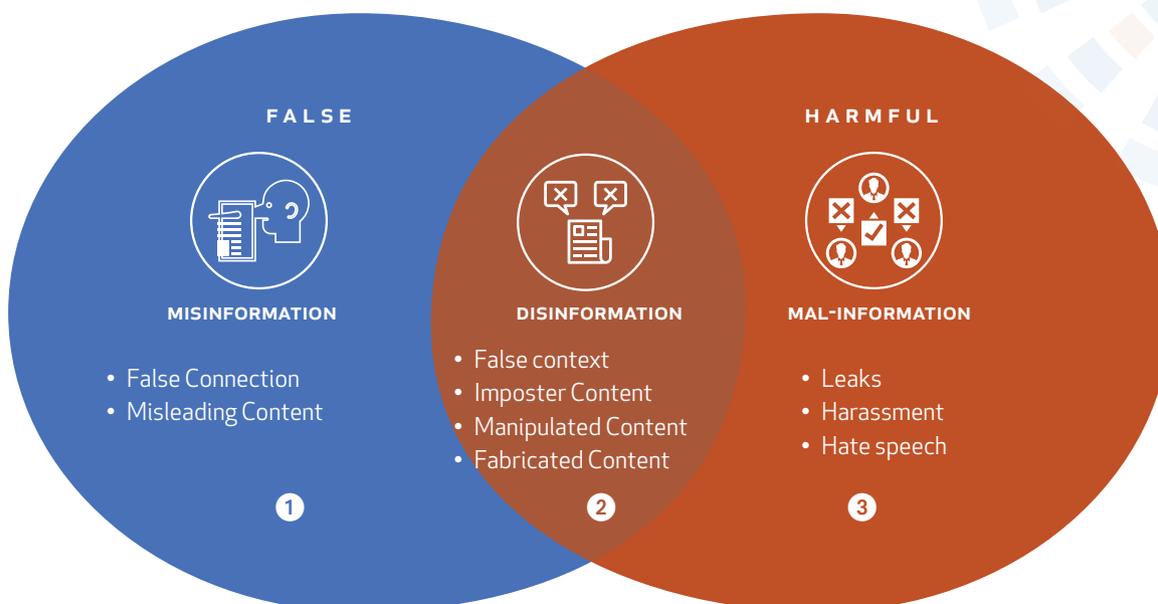


**Community  
detection**



**Analysis and  
metrics**

## Information pollution



Adapted from (UNDP, 2020) and (Derakhshan, 2017)

In this report we use the typology of informative pollution proposed in the “Guidance on Information Pollution” (UNDP, 2020) and (Derakhshan, 2017) (UNESCO and Ministry of the Presidency of the Dominican Republic, 2020):

- 1. Disinformation:** Information that is false and deliberately created to harm a person, social-group, organisation or country
- 2. Misinformation:** Information that is false, but not created with the intention of causing harm.
- 3. Mal-information:** Information that is based on real facts, but manipulated to inflict harm on a person, organisation or country

PART **1**  
**RETURNED MIGRANTS TO  
VENEZUELA**



# INTRODUCTION

## MIGRATION IN TWO ERAS



### THE ECONOMIC CRISIS AND MIGRATION

The migration of Venezuelans is one of the consequences of the complex crisis that the country is going through. On the economic level, the GDP has been contracting since 2014, the cumulative contraction in the period 2014-2019 is 55.3% according to the Central Bank of Venezuela. In the same period, oil production, the country's main source of income, fell by 79.2%. High inflation, the drastic fall in the purchasing power of wages and the disruption of basic public services (in the supply of electricity, water and more recently gasoline) has considerably reduced income (minimum wage less than \$2 per month at the end of 2020) and the quality of life of citizens; therefore, increasing income poverty. On the political level, hyperpolarisation and mutual ignorance between the government and the opposition has affected the functioning of the country's institutions and deteriorated social cohesion.

On the social front, the gains made during the oil price boom of 2002-2008 in poverty reduction, among other aspects, have been reversed. The extensive system of social programmes developed since 2002 has been significantly reduced.

At the international level, the US government's economic and financial sanctions and the disregard of the government by the Trump administration, Canada, the EU and some countries in the region, aggravate the situation.

This crisis has driven 5.4 million Venezuelans to emigrate from the country, according to UNHCR. The nearby South American countries of Colombia, Brazil, Ecuador and Peru have been the main destinations for migrants.

The cumulative contraction in the period 2014-2019 is **55.3%** according to the Central Bank of Venezuela. In the same period, oil production, the country's main source of income, fell by **79.2%**.





# MIGRATION IN TWO ERAS



## THE PANDEMIC AND THE RETURN OF MIGRANTS

With the arrival of COVID-19 and the social isolation measures taken to deal with it, living conditions in the host countries of Venezuelan migrants deteriorated. Informal labor (an important source of work for low-income migrants) and the economy in general were seriously affected throughout the region. Social programs to support the vulnerable population during the pandemic hardly covered migrants. This adverse economic context encouraged many Venezuelan migrants who had left the country to return, hoping to better cope with the pandemic in the shelter of their family and social networks in Venezuela. In the period March-July 2020, Colombia's Migration Department reported that 95,000 migrants had returned to Venezuela from that country. Reverse migration has become a topic of intense discussion on social networks and in the media.

### Conditions of return

Migrants attempting to return face a complicated situation. Tensions between the Colombian and Venezuelan governments have restricted the flow of trade and the mobility of people across the border. At the beginning of the pandemic, the Venezuelan government set up the so-called Integral Social Attention Posts (PASI), where returning migrants entering the country by land must undergo quarantine. According to Caritas and the Venezuelan Border Observatory, the insufficient number of accommodation centres for quarantine and the deficiencies in their staffing and functioning lead to a difficult stay in these centres.



In order to avoid the aforementioned difficulties, some migrants choose to enter the country through non official crossings called “trochas”, whereby migrants often fall prey to criminals and mistreatment. The absence of health controls at these crossings makes it impossible to detect people infected with the virus, generating an attitude of fear and stigmatisation of those who enter illegally.

Fear of contagion and aversion to returning migrants is present in the media and social networks whom are singled out as “sources of contagion” and seen as threats. They are stigmatised as “biological weapons” or “bioterrorists”.

Since August 2019, the national government has tried to facilitate the conditions for the return of vulnerable Venezuelans in host countries with the “Return to the Homeland Plan” (Plan Vuelta a la

Patria) (Ministry of Popular Power for Foreign Affairs, 2020). The Plan consists of “an air and land bridge for the voluntary return of all those migrants and their families who lack their own means of return”. According to official figures (Ministry of People’s Power for Foreign Affairs, 2020), as of February 2020, more than 17,000 Venezuelans have benefited from this plan.

In this section we analyse the impact on social networks of the discussion on the return of migrants to Venezuela, with special emphasis on information pollution in the context of the pandemic. We begin by showing the results obtained on Twitter, continue with the findings in Google Trends and with the monitoring of media with a digital presence, then we propose a communication strategy to mitigate the impact of information pollution on returned migrants, and close with the conclusions.



## SOURCES OF INFORMATION



### The data

A database was constructed to store all tweets posted in Venezuela about migrants in the period March-November 2020. The period starts in March because it is the month in which the coronavirus outbreak breaks out in the country. Relevant keywords, users and tags were used to identify tweets related to migrants. Additionally, a second database was constructed in a similar manner for the period June 2019 to February 2020. Comparisons between the two databases are used to measure the impact of the pandemic on discussions about migrants.

### Timeline



#### March-November 2020

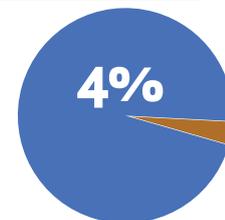
Number of tweets collected	<b>796,017</b>
Number of users	<b>87,961</b>
Monthly average of tweets	<b>88,446</b>
Weekly average of tweets	<b>17,727</b>



#### June 2019-February 2020

Number of tweets collected	<b>405,000</b>
Monthly average of tweets	<b>44,889</b>
Weekly average of tweets	<b>9,539</b>

Relative size of first Database with respect to number of tweets posted by Covid-19 in Venezuela

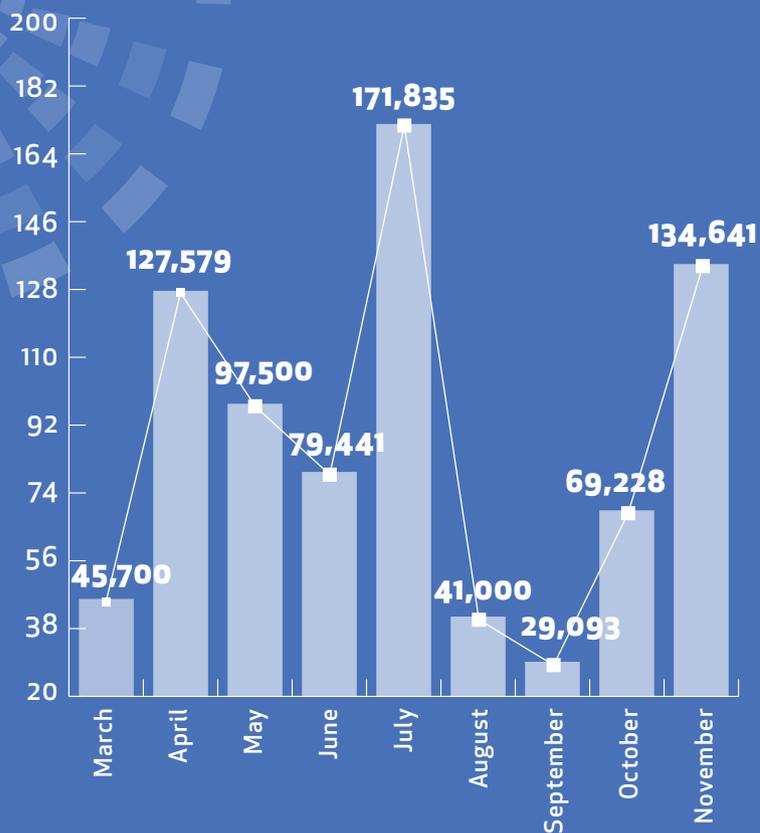




## Venezuela: monthly evolution



Number of tweets

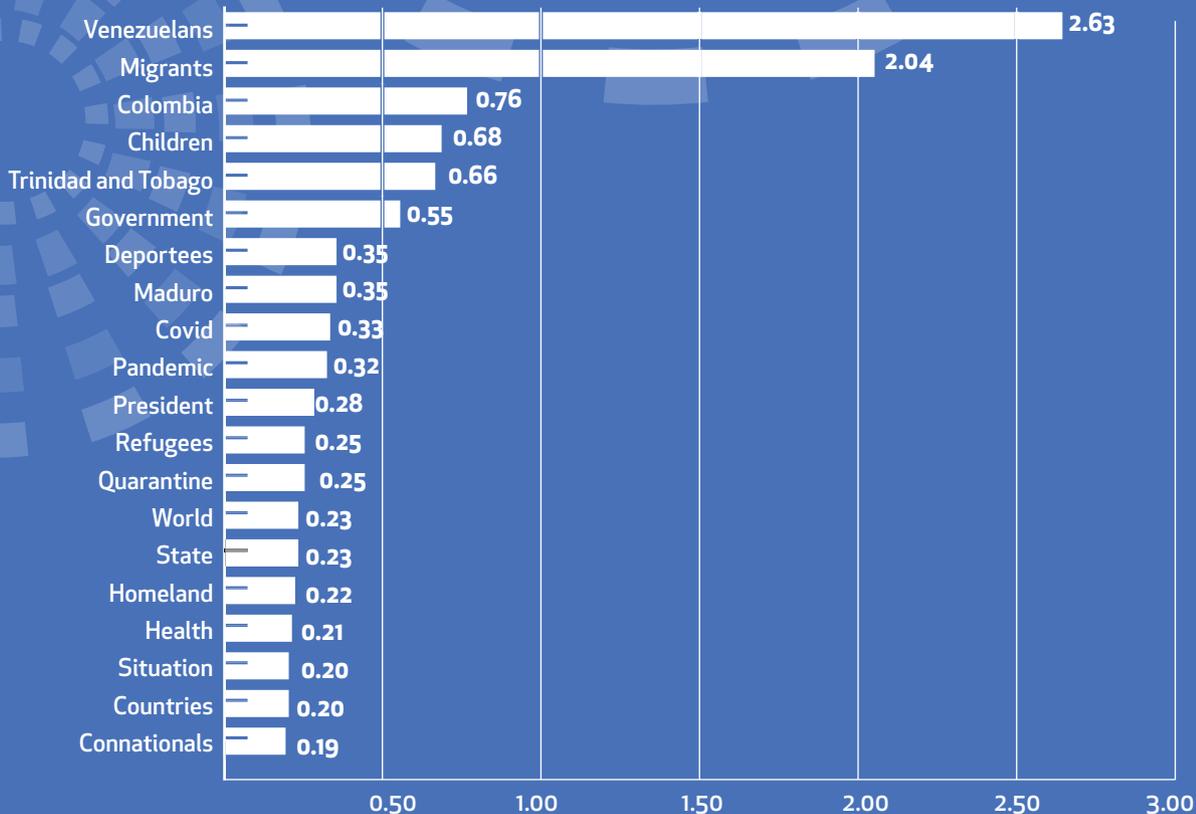


The graph shows that the highest number of tweets about returned migrants in Venezuela were published in July. During this month the cases reported in Venezuela, Colombia and Brazil have an increasing trend.





## Frequency words



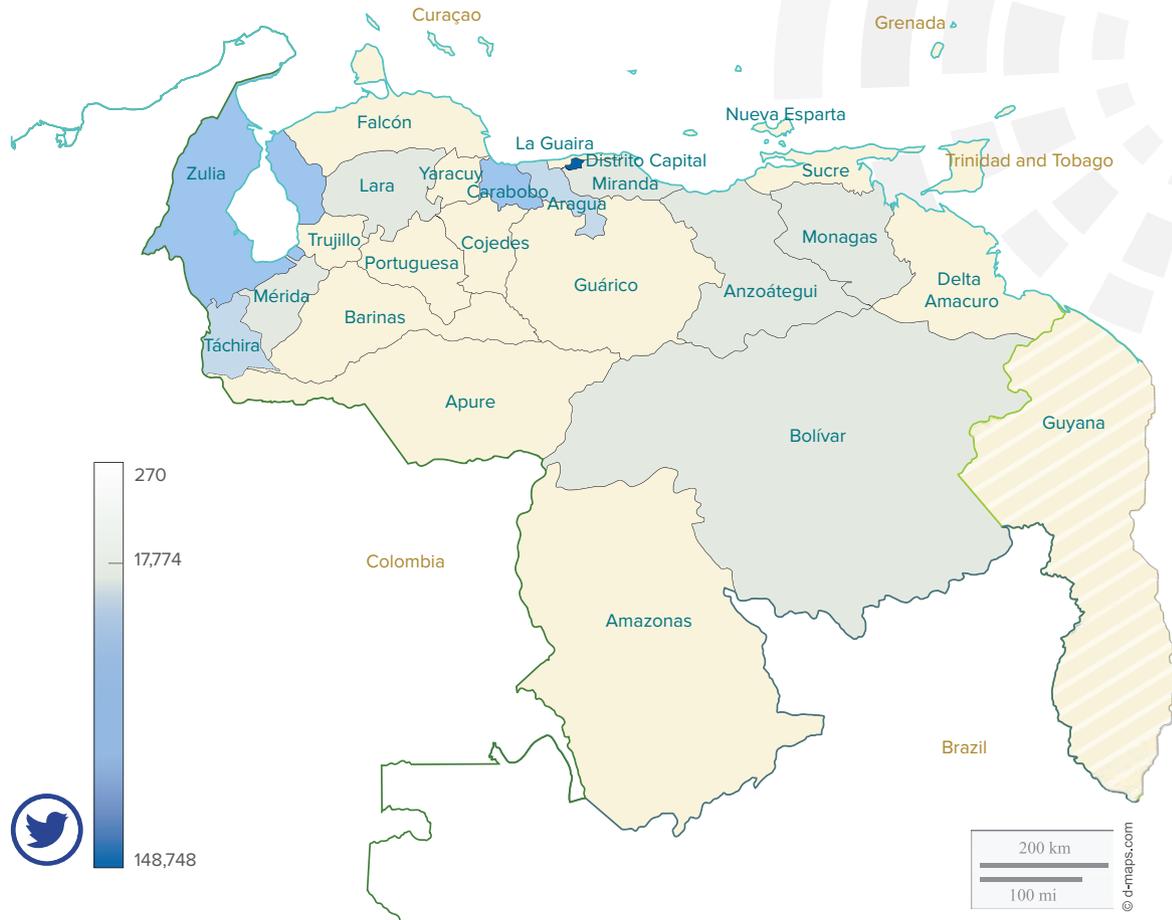
Proportion with respect of total words (%)



The table highlights the importance of the terms “Colombia” and “Trinidad and Tobago” in the discussion on migrants. It also highlights the importance of “Government”, “State” and President “Maduro”. “Children”, “Refugees” and “Deportees” is the most mentioned vulnerable population in the database.



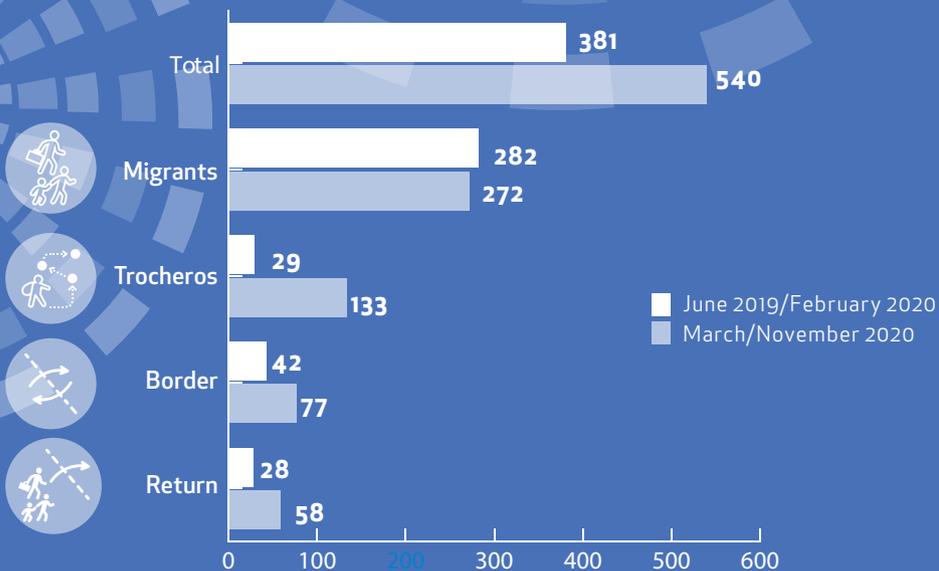
## Issuance of tweets by States



The Border States with the highest flow of human and commercial mobility, Táchira and Zulia, generate the highest number of tweets. The states of Carabobo, Aragua and Distrito Capital, highly populated states, also have a high participation in the discussion.



## Pandemic impact on the discussion

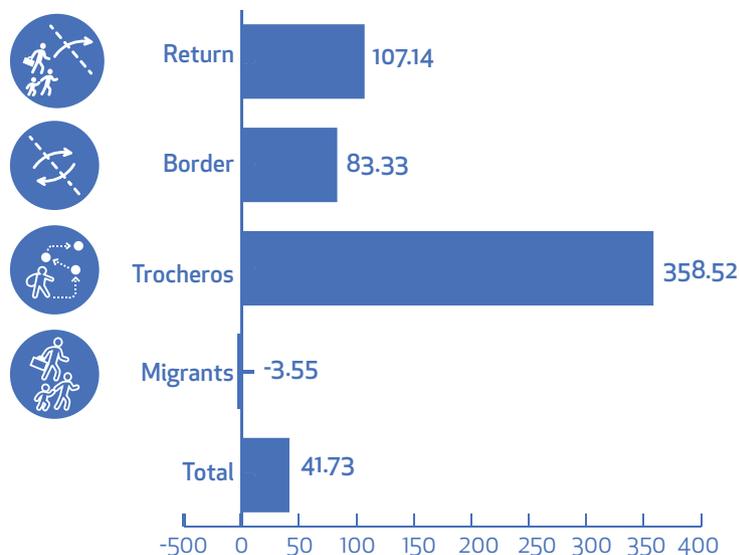


TOPIC OF DISCUSSION | NUMBER OF TWEETS (EXPRESSED IN THOUSANDS)

The impact of the pandemic on Twitter discussion about migrants is clear. The topic that shows the greatest variation between the two periods is “trocheros”, a variation that exceeds the sum of all the variations of the other terms.



## Percentage variations of the themes

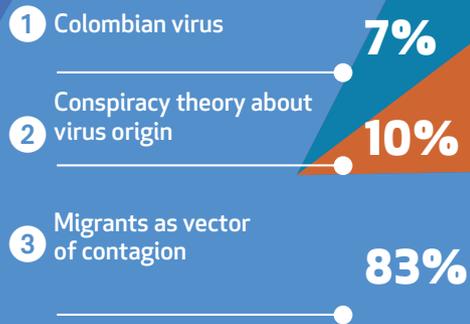


THEMATIC | PERCENTAGE VARIATIONS OF THE THEMES

Some users use the term “trocheros” to refer to people who enter the country through non-official crossings (“las trochas”), while others use it to refer to those who drive (and charge for it) people through these crossings. Despite the ambiguity of the term “trocheros”, the wide variation reflects concern about migrants returning through non-official crossings.



## Main Narratives



Narratives allow us to identify discursive patterns and common underlying messages in groupings of tweets (Dayter, 2015), we will explore how informational pollution is embedded in them and their relationship with the main user communities.



**1** Conspiracy theory about virus origin

**Representative Tweet**



Conspiracy theories about the origin of the virus are grouped into this narrative. The common argument is that the virus was artificially created or spread by powerful groups to harm humanity.

It combines two sub-narratives:

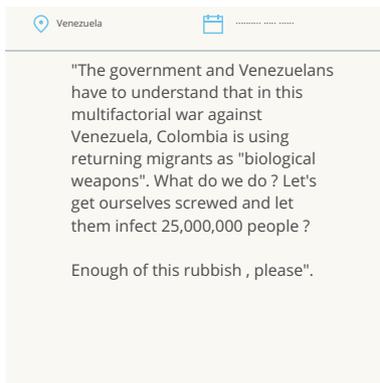
1. **The virus was deliberately created and spread by the Chinese government. They consider the pandemic as an aggression by China against the world.**
2. **The virus is created by the U.S. government as part of the Trump administration's trade war against China.**

Both narratives are local expressions of similar narratives at the global level, although they are connected to the political polarization in Venezuela.



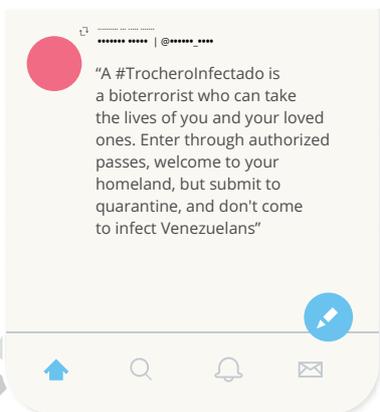
## NARRATIVE IDENTIFICATION

### 2 Colombian virus



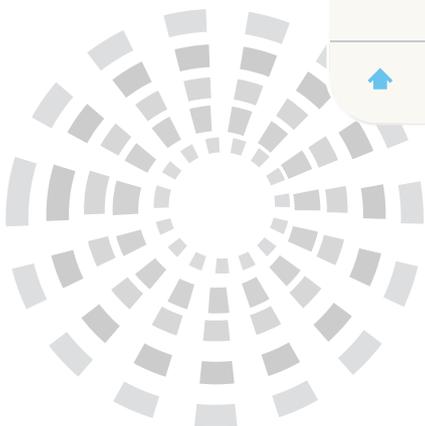
This narrative accuses the Colombian government of sending Venezuelan migrants through illegal crossings back to the country to spread the virus in Venezuela. This return is presented as the main cause of the epidemic in the country. It reinforces the idea that the pandemic is an external threat and an expression of the confrontation between the governments of Colombia and Venezuela.

### 3 Migrants who return as vector of contagion



The narrative states that migrants entering through illegal crossings are the main vectors of the virus. These migrants are sometimes described as "bioterrorists" or "biological weapons" who intend to spread the virus in Venezuela. They accuse returning migrants of not complying with sanitary norms and of knowingly infecting their relatives and neighbors. There are frequent calls to identify and report these migrants to the authorities.

The narrative has evolved; at the beginning it was more aggressive towards migrants, then it became more moderate.





## Information pollution

	No pollution	With pollution
<b>Total Country</b>	<b>784,809</b>	<b>11,208</b>
<b>1</b> Conspiracy theory about virus origin	65	518
<b>2</b> Colombian virus	4	398
<b>3</b> Migrants who return as vector of contagion	461	4,195
Does not belong to any narrative	784,279	6,097

More than half of the information pollution is not related to any of the narratives. The pollution linked to the main narratives is concentrated on returned migrants as a vector of contagion.



Disinformation



Misinformation



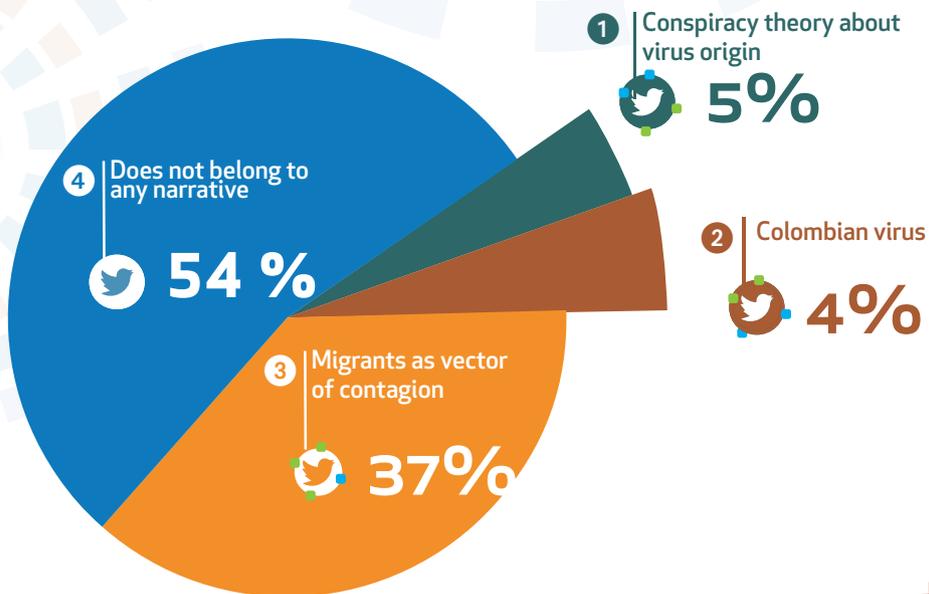
Mal-information

	Disinformation	Misinformation	Mal-information
<b>Total Country</b>	<b>8,084</b>	<b>941</b>	<b>2,183</b>
<b>1</b> Conspiracy theory about virus origin	510	-	8
<b>2</b> Colombian virus	259	-	139
<b>3</b> Migrants who return as vector of contagion	3,431	-	764
Does not belong to any narrative	3,884	941	1,272

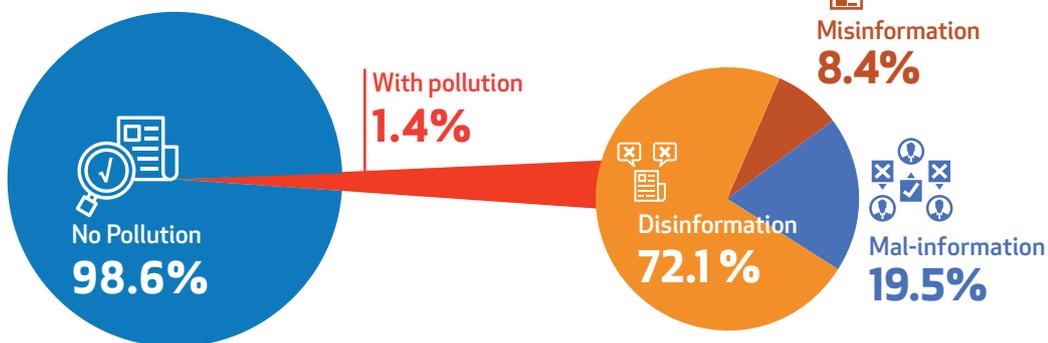
Migrants who return by non-official crossings are the main target of information pollution on the subject. Fear of contagion is the feeling used against migrants. Some foreign governments are also the target of conspiracy theories. Disinformation (false information with intent to harm) as a major type of information pollution is a consequence of the use of conspiracy theories as the main strategy of information pollution in all narratives. The nature of these theories blames and harms certain groups, foreign governments or migrants who return the country through non-official crossings, as the cause of the pandemic.



## Proportion of tweets with pollution by narratives



For every 71 tweets, 1 is polluted





## COMMUNITIES

### What are user communities?

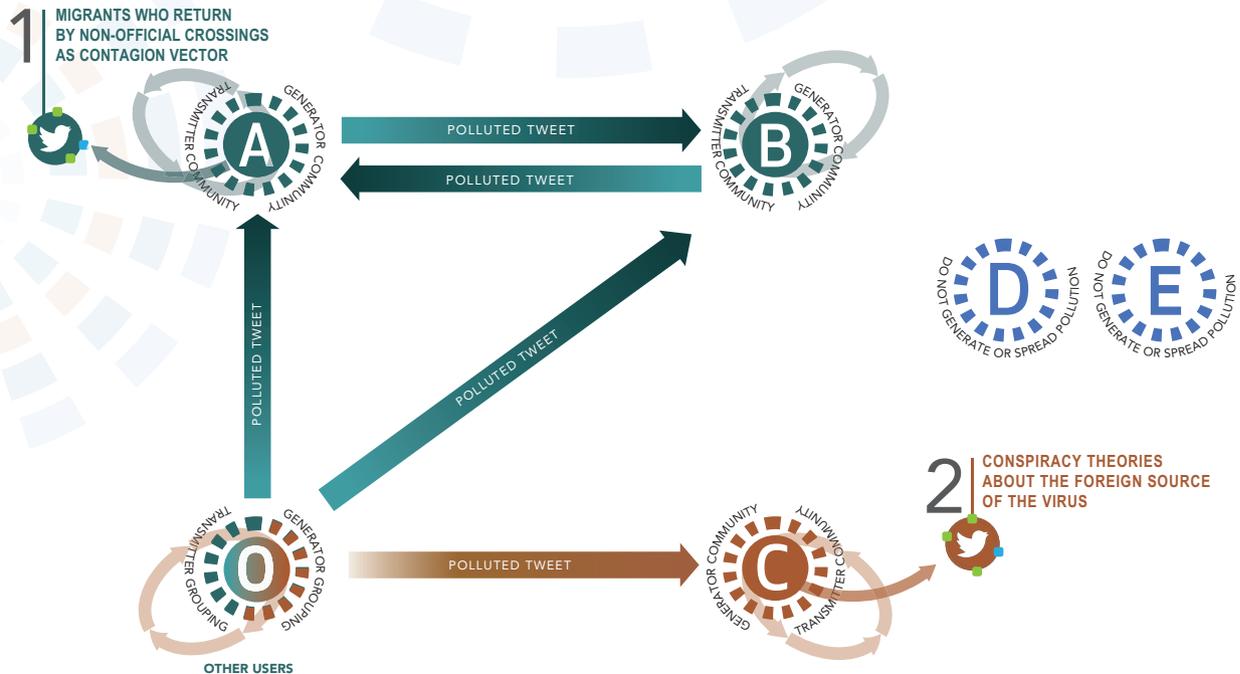
Communities are groups of users who share opinions and support each other by spreading messages. Communities are identified (Blondel, 2008) (Zalmout, 2013) based on retweets between users. The influence of communities on Twitter is often very important. In the discussion on returned migrants to Venezuela, 5 communities and the grouping "Other users" were detected, which brings together isolated users and very small groups of users that do not reach the structure of a community due to

their small size. The detected communities gather together 8,381 members, which represents 59% of the users participating in the discussion, and have a very polarised political behaviour. Their most striking characteristic is their positioning in the confrontation between the government and the opposition. The communities are relevant for identifying narratives and patterns of propagation of information pollution.



## COMMUNITY DETECTION

### Information pollution flows



The image represents the information pollution flows between communities.

The arcs point to the source of the pollution, for example, an arc from Community B to A means that the polluted tweet was generated in A and broadcasted B.

To simplify the graph, the polluted tweets were reduced to two groups.

- The first group, in green, represents tweets that stigmatize returned migrants.
- The second group, represented in brown, brings together the narratives “Conspiracy theories about the origin of the virus” and “Colombian virus”.

Community C is the generator and relay of contamination of the second group of tweets, while A, B and the node “Other users” are generators and re-transmitters of contamination on returning migrants.

D and E do not generate or spread pollution.



## Polarisation and information pollution

We can group the identified communities according to their level of political polarization. The group made up of communities A, B and C are very “politically polarized and have a hyper-partisan behaviour in the government-opposition confrontation. The second “non-partisan” group is made up of D and E. For this group, political confrontation is not a central aspect of the community. It is noteworthy that only the group of partisan communities and “Other users” are the generators and transmitters of pollution. The fact that the two “non-partisan” communities do not generate or transmit pollution suggests that they are vigilant in this regard. The media and human rights organizations belong to the non-partisan group.

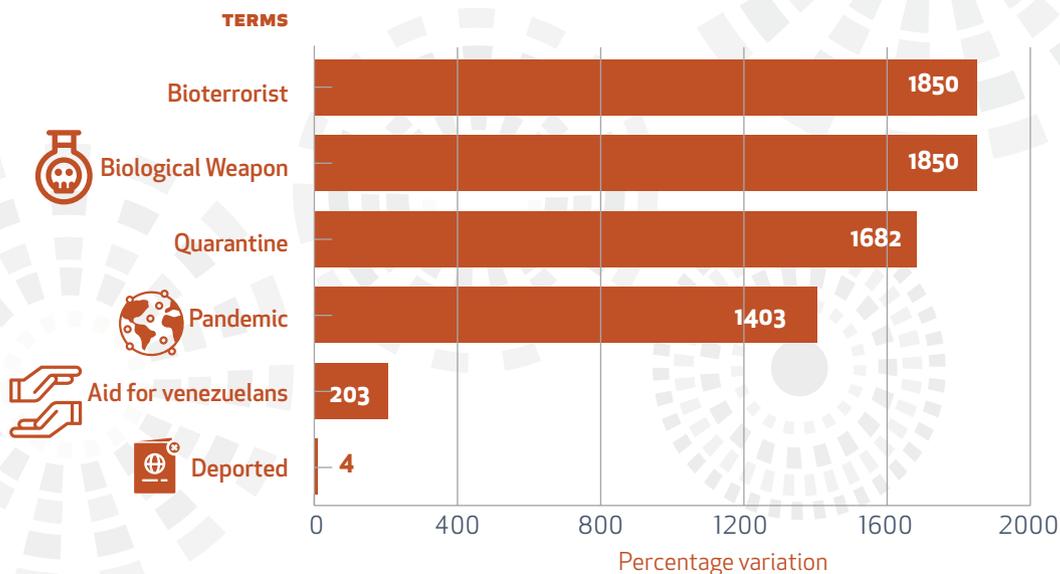
Political polarisation in Venezuela is the main cause of information pollution about returned migrants. In the Venezuelan political conflict, the opposing parties do not recognise each other as adversaries, nor as members of the same society having common interests but different positions. The fact of the matter is that they do recognise each other only as enemies. A significant part of the opposition does not recognise the government and calls on the international community to disown it, to sanction it economically and to seize the nation’s assets abroad. The government, for its part, accuses this sector of the opposition of being an instrument of the US government to damage the country. As a consequence of this fierce confrontation, disinformation and mal-information messages aimed at harming the “enemy” or its international allies are frequent. The main instrument employed in this confrontation is conspiracy theories

## Google Trends

Google Trends is a tool that allows you to quantify Google searches for a term in a specific country and in a specific time period. It is of interest because it allows identifying the information demands of Internet users on terms related to a particular topic.

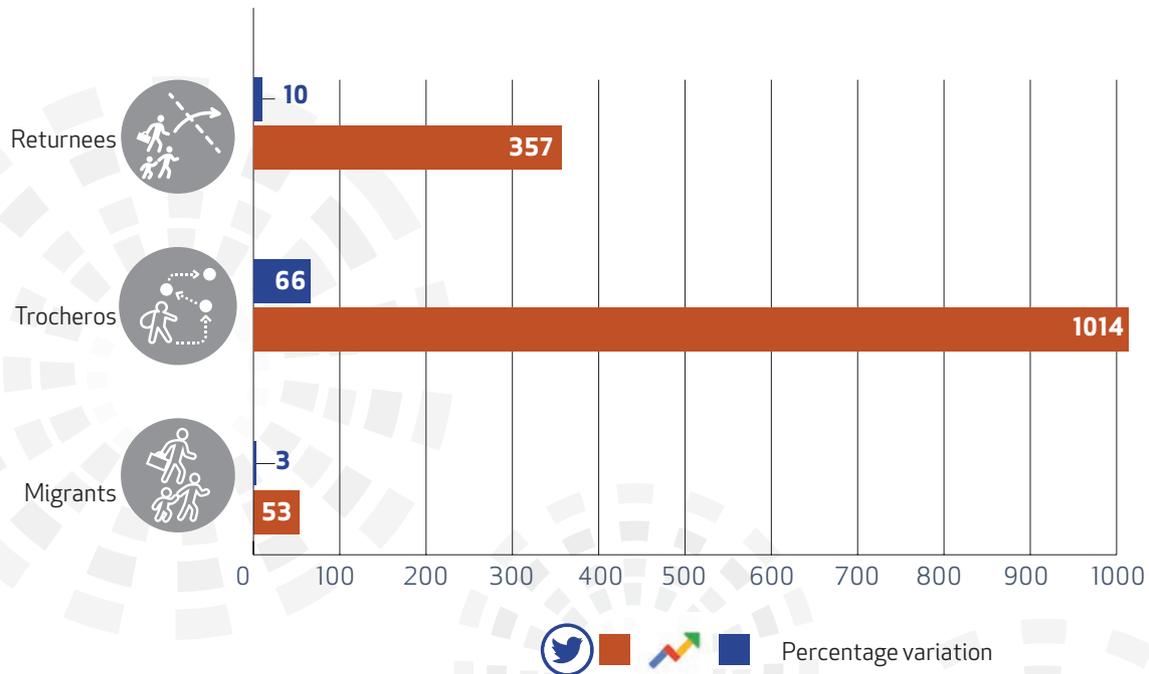
>> Very significant are the increases in Google searches for key terms that have marked the discussion and pollution of returned migrants. The terms “Bioterrorist” and “Biological weapon”, which appear in the first two places, show the interest in the discussion and the very positive attitude of Internet users in gathering information about the discussions in social networks. This attitude is one of the recommendations of the specialists to face information pollution.

**Percentage changes in Google Trends searches** between the periods June 2019-February 2020 and March-November 2020.





### Percentage changes in Google Trends and topical searches on Twitter between June 2019-February 2020 and March-November 2020.



Although all the terms or topics indicated present positive variations in Twitter and Google Trends, it is noteworthy that the magnitudes of the variations in Twitter are substantially greater. The gap between both magnitudes also reflects the differences between the demands or requirements for information, represented by Google Trends, and the supply or exposure to information to which users are exposed, represented by Twitter.

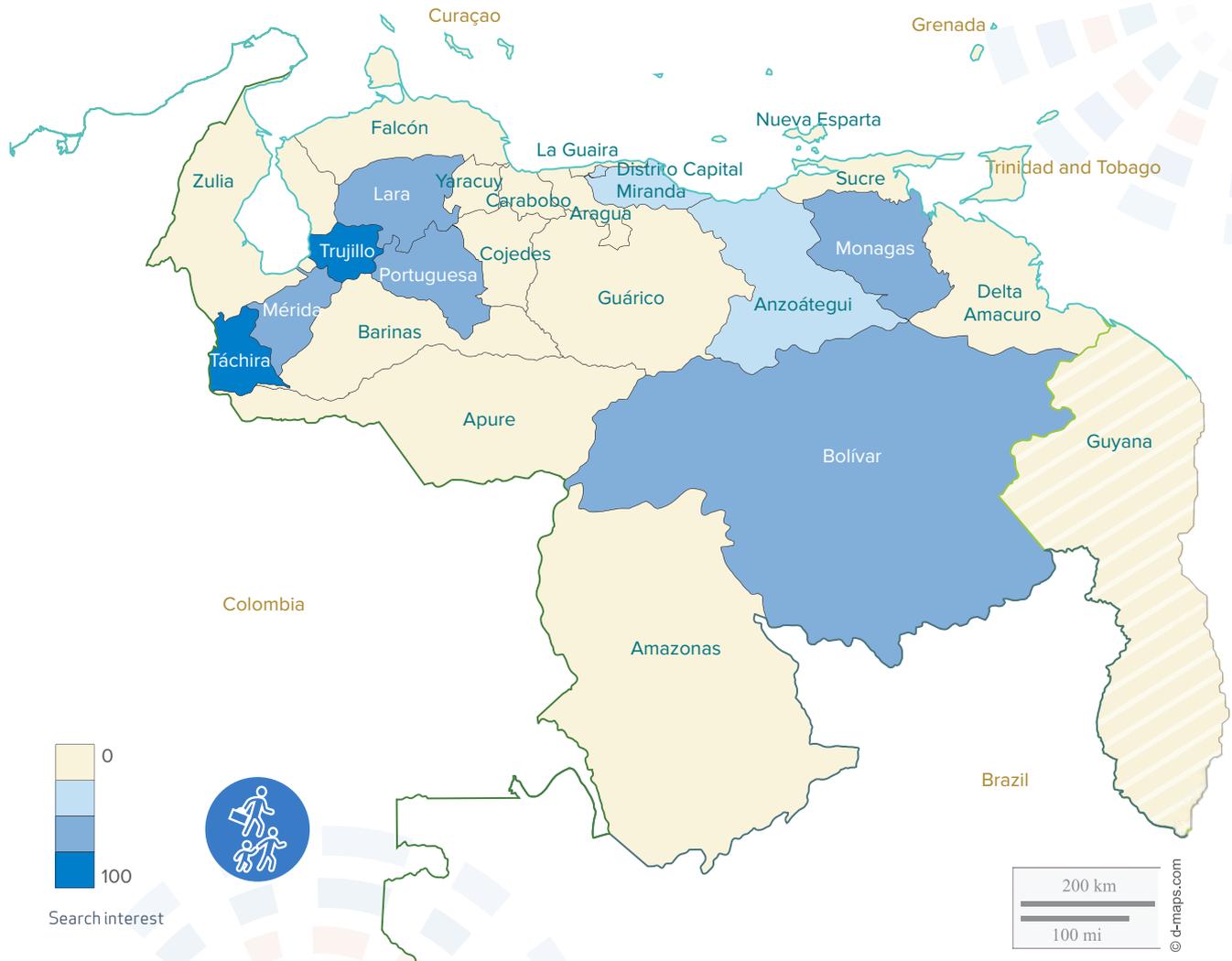


## Returnees





# Migrants





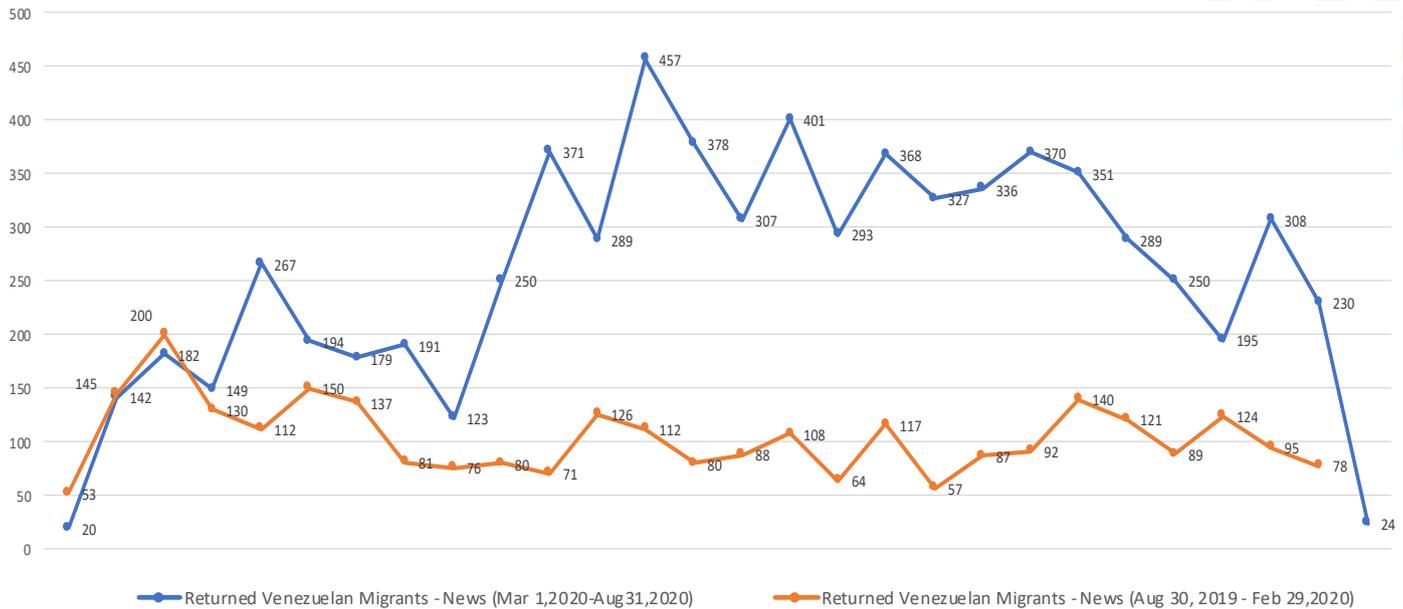
## Trocheros





## MEDIA

A total of 37 digital media were consulted using the Meltwater tool and complemented with other Internet searches. These media include digital versions of print media and exclusively digital media. The news and opinion genres were considered, in addition to radio media in their digital version.



The news reports detected about migrants returned to Venezuela increased in the six months between March-August 2020 in relation to September 2019-February 2020.



## NARRATIVE IDENTIFICATION

### Fact Checkers

The concern about information contamination has been present on the internet (Tardáguila, 2019). Newspaper reports, forums and new organizations in the area of “fact checkers” are addressing the issue. Among the web portals and Twitter accounts that are dedicated to fact-checking are [espaja.com](http://espaja.com), [cazadoresdefakenews.info](http://cazadoresdefakenews.info), [efectococuyo.com](http://efectococuyo.com) and the Venezuelan Fakenews Observatory ([fakenews.cotejo.info](http://fakenews.cotejo.info) and <https://twitter.com/observatoriofn?lang=en>).

### Main narratives

**External origin of virus:  
Brazil and Colombia**

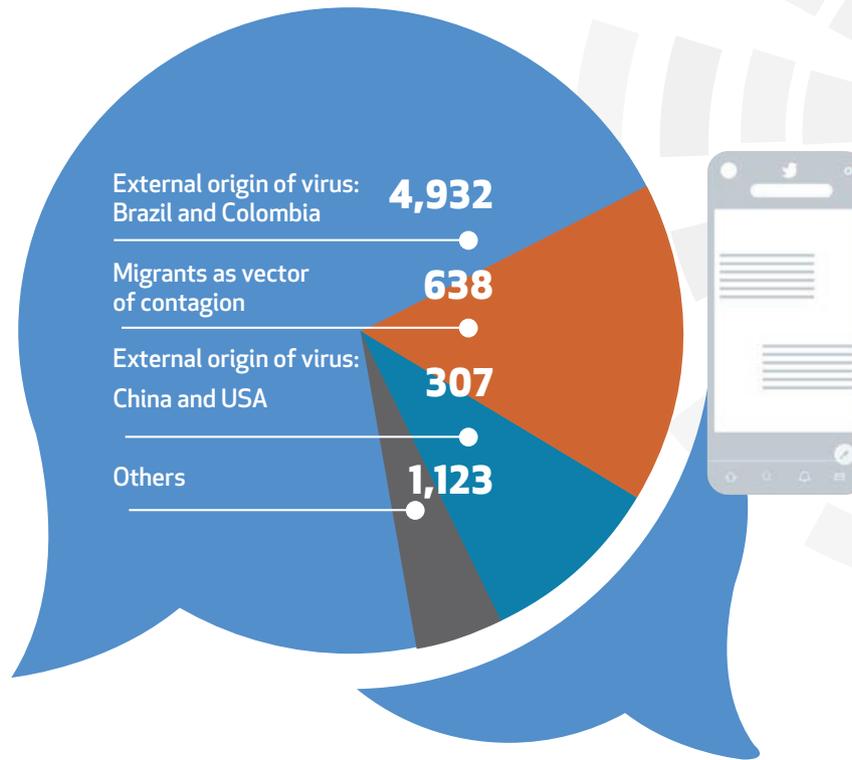
It is emphasized that the virus is of foreign origin with the implicit message that the pandemic is not a problem that arose in the country. Colombia and Brazil, the countries with the greatest human border mobility and trade flows, are mainly mentioned. Unlike the equivalent narrative on Twitter, Brazil is included.

**External origin of virus: China and USA**

China and the US: This narrative is very similar to the equivalent Twitter narrative.

**Migrants as vector of contagion**

Similar to the equivalent narrative on Twitter, illegal migrants who enter the country and fail to comply with health regulations are accused of being the main vectors of contagion of the virus. Calls to denounce illegal migrants are also present. However, the label “bioterrorists” or “biological weapons” is very rare in this narrative.



The narratives identified in the digital media are very similar to those on Twitter. As in the social network, the most frequent types of information pollution are disinformation and mal-information. Unlike Twitter, the narrative with the highest volume is “External origin of the virus: Brazil and Colombia”. It is also noteworthy that the narratives on social networks are much more aggressive than the corresponding ones in the media.

On the other hand, although the critical area for the return of Venezuelan migrants is the borderline, the information pollution detected in digital media with a national scope is greater than in those with a regional scope.

# COMMUNICATION STRATEGY

## to mitigate information pollution: Venezuela case

### → General objective

Provide information to the public that allows the identification of information pollution through communication actions.

### → Specific objectives

- Sensitize public opinion to mitigate the effects of stigmatization on the returned migrant population.
- Report on how to combat the effects of information pollution.
- Contribute to building capacities in community teams and communication professionals to counteract the effects of information pollution, in regions especially affected by stigmatization.

### → Target audience

- Community leaders and volunteers in service activities, in social organizations, sports and NGOs.
- Social communicators, especially in border areas.
- National, state and municipal government institutions involved in responding to the pandemic.
- State and municipal health institutions, involved in the care of the pandemic.

### → Action plan

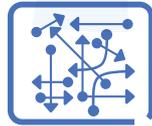
Objective	Approach	Activity	Pieces	Channels	Exposure time	Indicators
1 Sensitize public opinion to mitigate the effects of stigmatization towards the returned migrant population	External communication for behavior change	Develop a Testimonial Campaign in which neighbors, family and migrants promote positive messages about preventing discrimination caused by mal-information and disinformation.	<ul style="list-style-type: none"><li>• Radio 20"</li><li>• Videos 40"</li></ul>	<ul style="list-style-type: none"><li>• Media of national / regional scope</li><li>• Boardcast television</li><li>• Social media</li><li>• Radio</li><li>• Regional news portals / border sections</li></ul>	Between 1 to 2 months	<ul style="list-style-type: none"><li>• Numbers of messages issued</li><li>• Number of likes and amount of content shared</li></ul>

Objective	Approach	Activity	Pieces	Channels	Exposure time	Indicators
2 Report the effects of information pollution on social and community life and how to combat it	External Communication, for behavior change/ Communication for advocacy	Develop an information campaign on: <ul style="list-style-type: none"> <li>• What is informative pollution?</li> <li>• How does social coexistence affect?</li> <li>• Forms of stigmatization</li> <li>• How to stop pollution and stigma?</li> </ul>	<ul style="list-style-type: none"> <li>• Microsite</li> <li>• Banners</li> <li>• Post on social media</li> <li>• Posters</li> <li>• Leaflets</li> <li>• Signs</li> <li>• Loudspeakers</li> <li>• Talks for community teams</li> <li>• Dialogues with community officials and servants</li> </ul>	<ul style="list-style-type: none"> <li>• WebUNDP</li> <li>• National/regional media portals</li> <li>• Social media</li> <li>• Community centers</li> <li>• Bus Stations</li> <li>• Municipal markets</li> <li>• Parcel sites</li> <li>• Supermarkets, bakeries</li> <li>• Public offices</li> <li>• Health centers</li> <li>• Traffic lights</li> <li>• Talks</li> <li>• PodCast</li> <li>• WhatsApp workshops</li> </ul>	6 months	<ul style="list-style-type: none"> <li>Number of visits to the microsite.</li> <li>Number of views and clics on banners.</li> <li>Number of likes and amount of content shared.</li> <li>Amount of printed material distributed.</li> <li>Number of photographs of exposed material.</li> <li>Number of talks made</li> <li>Number of workshops carried out</li> <li>Interviews with participants</li> </ul>
3 Contribute to building capacities in communication professionals and community teams for the identification and containment of the spread of informational disorders.	Communication for appropriation	Create alliances with a knowledge center and regional media to design a course for social promoters and journalists	Informative Guidance Laboratory	<ul style="list-style-type: none"> <li>• Webex</li> <li>• WhatsApps</li> <li>• Class by Radio</li> </ul>	6 months	Consecutive cycles

## CONCLUSIONS

---

- During the pandemic, there has been a substantial increase in the volume of discussion on social networks and in the media about the return of migrants to Venezuela. The number of tweets, Google Trends searches for terms and press releases about the return of migrants increased considerably.
- The narratives and information pollution identified on Twitter and in the media can be classified into two main groups. The first, conspiracy theories about the external origin of the virus. The second, which points to returned migrants by non-official crossings as the main vector of contagion. Conspiracy theories are the privileged contamination strategy in both groups.
- Returning migrants by non-official crossings are victims of stigmatisation. On Twitter and in the media, messages are frequent in which migrants who do not comply with sanitary controls are perceived as vectors of contagion, which, combined with conspiracy theories, give rise to the qualification of “biological weapons” or “bioterrorists”.
- Information pollution is more aggressive on Twitter than in the media. The lower legal liability for publishing content on networks compared to the media seems to be the cause of this difference.
- Fear of contagion is the feeling magnified by information pollution.



- The discussion about the pandemic and returned migrants is closely linked to the country's highly polarised political debate. Political polarisation in Venezuela is the main cause of information pollution about returned migrants.
- The user communities detected on Twitter on the discussion of migrants are also heavily influenced by political polarisation. Highly polarised communities spread information pollution, while non-polarised communities do not generate pollution.
- Strategies to address information pollution must take polarisation into account. Reducing political polarisation is a condition for reducing pollution.
- Google Trends confirms the trends of Twitter, although the demand for information in Google Trends is substantially lower than the supply of information on Twitter. The gap between information demand and supply needs to be analysed in more detail.
- Google Trends evidenced the interest generated by the discussion on migrants and the very positive attitude of internet users in gathering information about the discussions on social networks. This attitude is one of the specialists' recommendations for dealing with information pollution.
- The communication strategy to mitigate the effects of information pollution on Venezuelan migrants returning to the country during the pandemic should provide information to the public to identify information pollution and be implemented at the national and subnational levels with public, private, community and NGO institutions.

PART **2**  
**WOMEN AND THE LGBTIQ+ COMMUNITY  
IN PANAMA**



## INTRODUCTION

---

Panama declared a state of emergency for COVID-19 on March 13, 2020 and the full quarantine went into effect on March 24\*. Schools were closed on March 10. The gradual opening of the country began in September, starting with the lifting of gender-based movement, ordering free movement on Saturdays and maintaining total closure on Sundays. In December the measures were resumed due to the increase in cases.

Before the pandemic, the government, in office since 1 July 2019, was still adjusting its work plan. Panama was among the fastest growing economies in Latin America; conversely, faced at the same time its reality as a country struggling with poverty, corruption and inequality. A dialogue to address the construction of a new constitution had begun.

Panama has a population of 4.28 million (68% live in urban areas); 2.63 million have internet service (62%); 2.40 million are active users of social networks. Facebook has 1.8 million registered users, Instagram 1.6 and Twitter 469,000. There are currently 4.86 million active mobile phone lines, representing 114% of the population, 33% of Panamanians are connected to the internet via mobile phones (Hootsuite - We are Social, 2020).

Although the Twitter audience is not as representative in number of users as Facebook or Instagram, Twitter is the privileged platform in the country to discuss public, social and political issues.

In the first months of the pandemic, public debate on social media focused on approval of health management, followed by questions about the allocation of resources to address the crisis and the lack of transparency.

During the months of confinement, a forceful discussion seemed to jeopardise the authorities' response. There were calls for disobedience with public demonstrations, neglect of traffic times and the holding of public events where hundreds of people gathered.

Social media reports of domestic violence increased, but formal complaints decreased. Part of this situation was due to the fact that formal reporting channels remained closed. Femicides increased by 64% compared to 2019.

A first assessment indicates that, confined to their aggressors, women continued to suffer from gender-based violence without being able to report their cases. Social networks began to be populated with messages against or in favour of gender equality, centered on the demands of gender equality rights groups and feminist groups and users who questioned the lack of information regarding cases of violence.

At the same time, with the establishment of circulation schedules for the purchase of food and medicines based on biological sex, complaints multiplied in social networks and traditional media of transgender people being discriminated against and not being allowed access to supermarkets and pharmacies on women's shopping days

\*Note: By 14 October, most of the restrictive measures had been lifted, leaving a total quarantine on Sundays, beach use and mass events.



because their personal identity card showed their male sex, and they were not allowed to shop on days assigned for men because their physical appearance did not match that of the public assigned for that day. Several pronouncements by human rights organisations, and even the Inter-American Court of Human Rights, increased the dialogue on social media about this situation.

In both positions, for or against, we found relevant, timely and valuable information in its source, content and approach; but we also found disinformation, manipulation of information or pollution and, above all, hate messages.

To try to better understand what was happening, this study allowed us to delve deeper into the situation of information pollution, sources, content, scope and consequences. To identify audiences, communities and user groups that were generating pollution to finally allow us to propose actions to support the cleaning of the information environment in the response to COVID-19 and to raise the voice of vulnerable groups.

Another relevant starting point for focusing the study on women was that during the two previous electoral processes (2004 and 2009) there was an increase in hate speech, the dissemination of fake news and attacks on candidates, in notorious cases against women candidates.

Civil society groups working on content analysis or generating content for digital conversations were key to better understanding this information ecosystem.

Partnerships are especially important to get a better picture of the situation, so we interviewed journalists, social researchers, women's associations and the LGBTIQ+ community to get a scope of the problem and how it is addressed by each specific group.

Mainly we did not find, as in the case of Venezuela, a common narrative between COVID-19 and informative contamination towards the group of women and LGBTIQ+ population directly. What the COVID-19 scenario raised, and mainly the quarantine, was a situation that managed to make visible conditions that were already underlying in society in terms of violence and discrimination. The study led us to identify a marked power struggle between pro-human rights groups and conservative groups that use social networks as a stage for confrontation in defence of their positions.

An important thing that the study allowed us to identify was that the messages, polluted or not, are signed by real users, not by robots or call centres. The generators of the messages identify themselves and are proud to do so. It is necessary to delve deeper into communities of dispersed users who do not seem to align themselves with identified communities or clusters of information and who generate pollution.

An important group identified are social communicators, who contribute a large part of the polluted message, either by originating it or amplifying it with retweets. This community deserves further study, but also provides an opportunity to work with them in the future to adjust the dialogue for human rights and respect for people.



## INFORMATION SOURCES

### Twitter



#### The data

Similar to the Venezuelan case, two databases were built with tweets published in Panama. The first and second databases contain tweets published in the period March-November 2020 and from June 2019 to February 2020, respectively. Both bases were built by selecting the tweets that contained keywords related to women or the LGBTIQ+ community in Panama.

#### Timeline

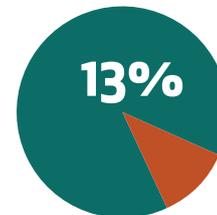
##### March-November 2020

Number of tweets collected	<b>294,330</b>
Number of users	<b>27,649</b>
Montly average of Tweets	<b>32,703</b>
Weekly average of Tweets	<b>5,856</b>

##### June 2019- February 2020

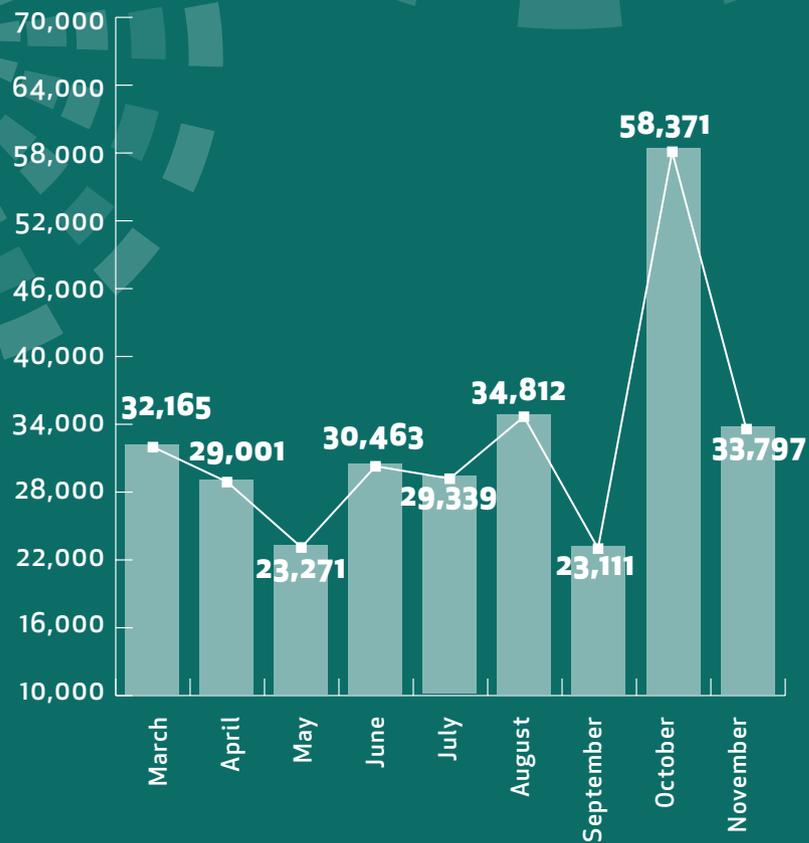
Number of tweets collected	<b>208,000</b>
Montly average of Tweets	<b>23,778</b>
Weekly average of Tweets	<b>5,231</b>

Relative size of first Database with respect to number of tweets posted by Covid-19 in Panama



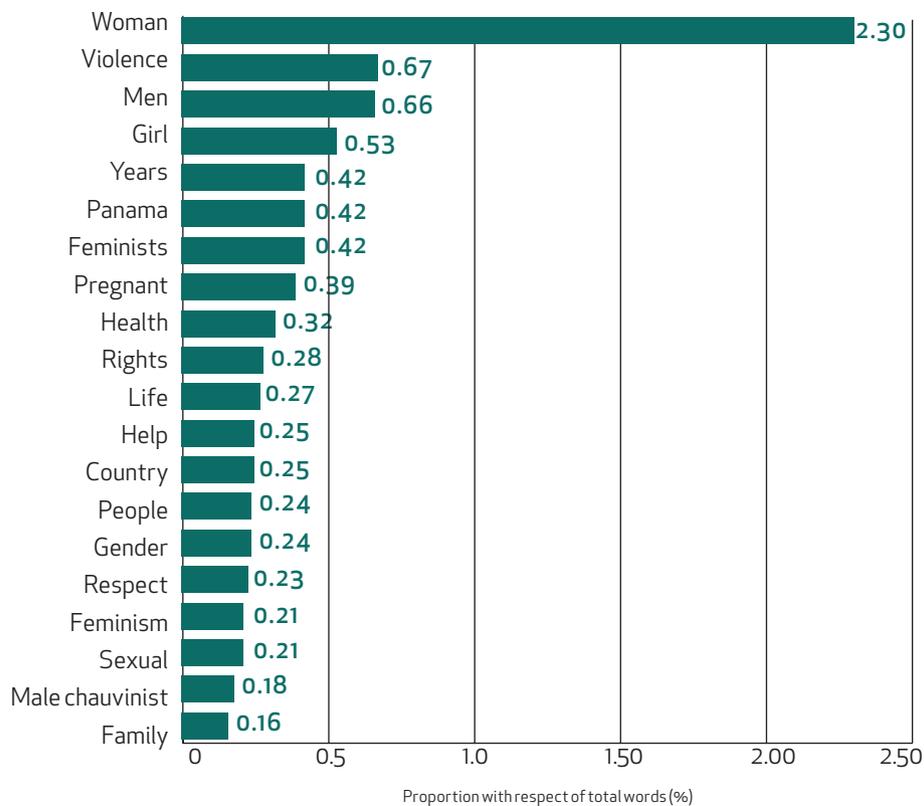


## Panama: monthly evolution





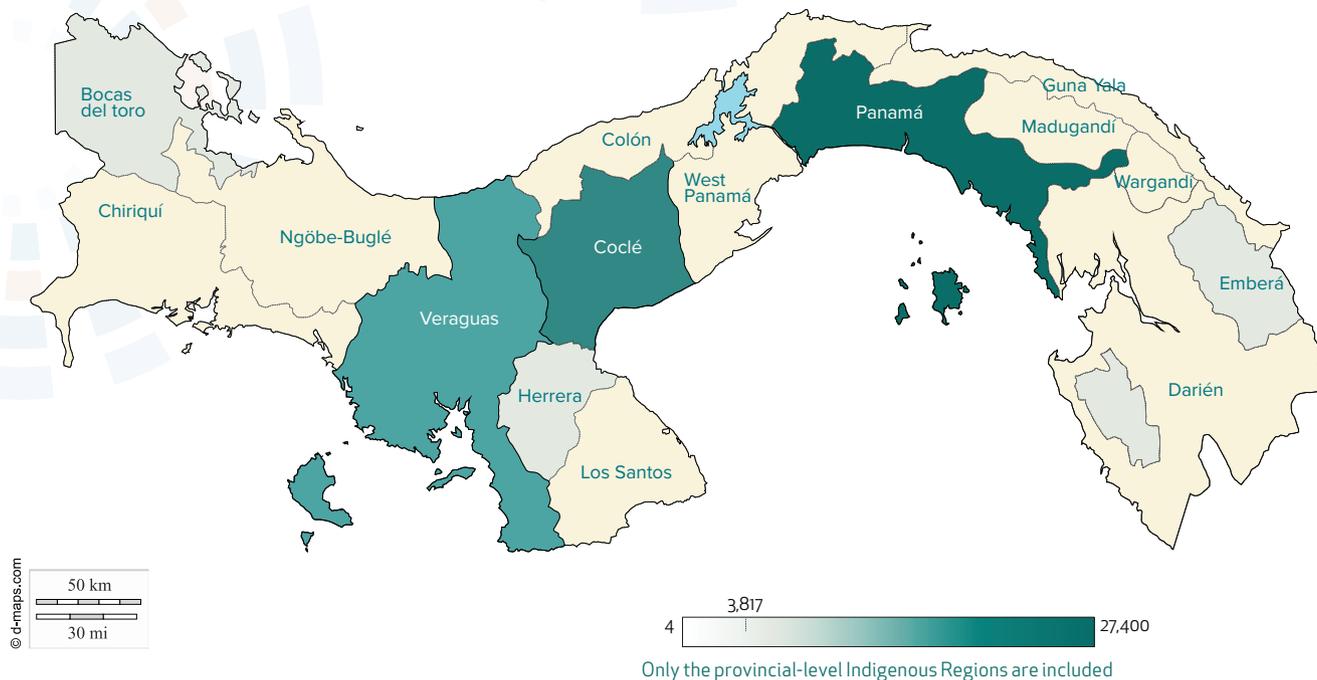
## Frequency words



The terms "Woman", "Violence", "Girl", "Feminists", "Pregnant", "Gender", "Feminism", "Respect" and "Family" stand out, all of them relevant in the discussion on gender. Based on these words, checked against with the COVID-19 approach, the contents were grouped for both Twitter and traditional media.



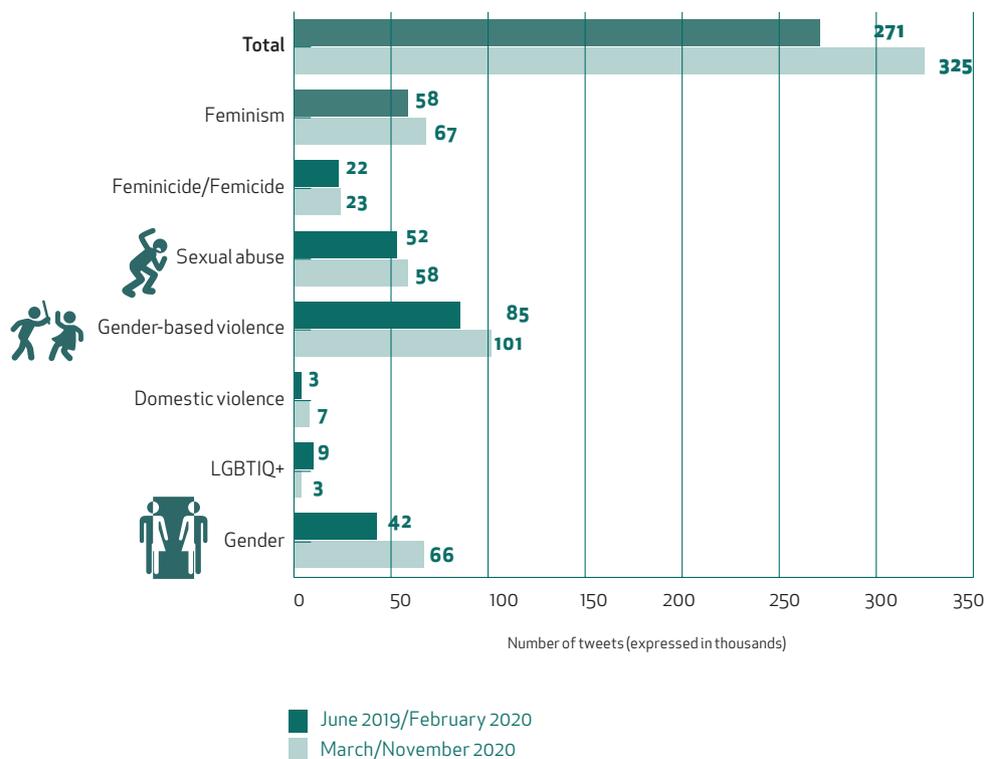
## Issuance of tweets by Provinces and Indigenous Regions



The population of Panama is centered in the provinces of Panama and Colon. In connectivity, both provinces also lead. Coclé and Veraguas together have around 600 thousand inhabitants. Other studies managed by UNDP have found that participation in digital dialogue is high in both provinces.



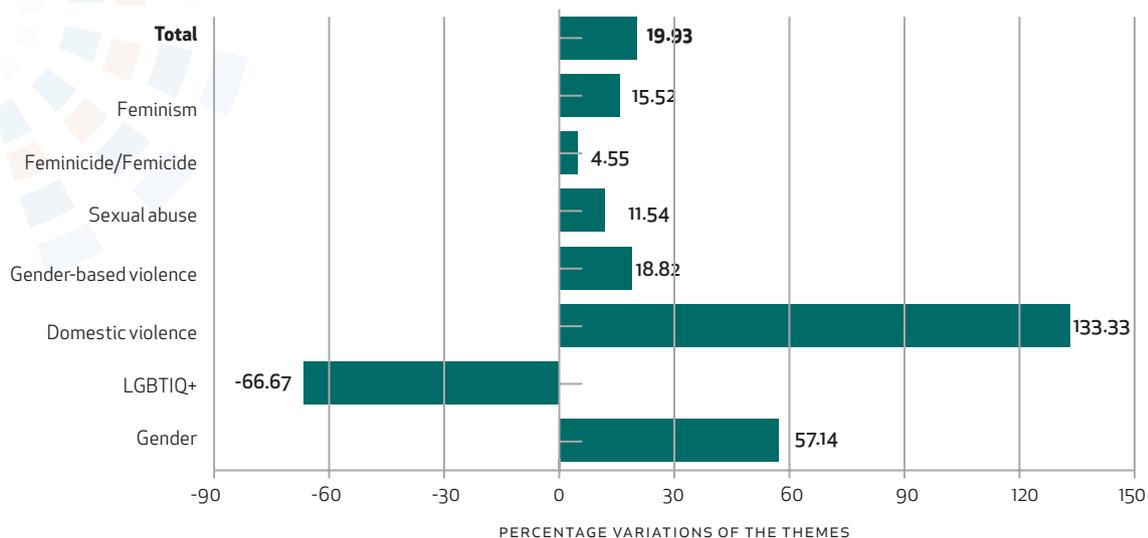
## Pandemic impact on the discussion





## Percentage variations of the themes

Between the periods June 2019-February 2020 and March-November 2020

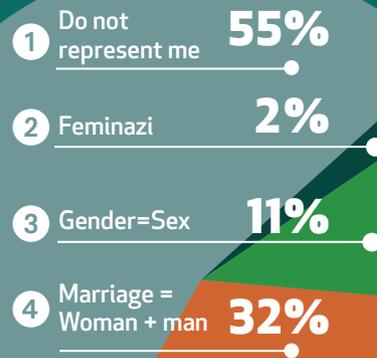


General discussion of women and the LGBTQ+ community increased during the pandemic, although unevenly. “Feminism”, “Abuse”, “Gender-based violence”, “Domestic violence” and “Gender” had clear increases. “Femicide” increased little, while LGBTQ+ contracted.



## Main Narratives

The main narratives are framed by the confrontation of conservative and progressive values in the discussion of gender equality. Although the discussion of gender is not directly related to COVID-19 and its effects, the volume and intensity of discussion increases during the pandemic. No “bots” were detected in the discussion.





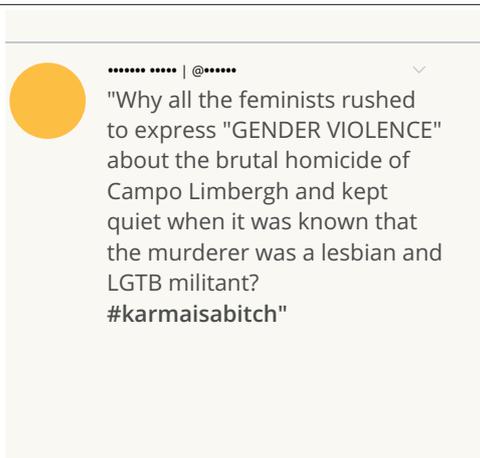
NARRATIVE IDENTIFICATION

## MAIN NARRATIVES



### Representative tweet

#### 1 Do not represent me



This narrative groups together positions contrary to Panamanian feminist organizations or spokespersons. It includes two sub-narratives:

1. **Alternative definitions of feminism or criticisms for inadequate representation of feminist principles.**
2. **Anti-abortion and anti-gender diversity positions by conservative groups.**

Both sub-narratives express criticisms of the values espoused by feminism.

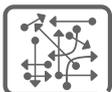
#### 2 Feminazi



It is a narrative that has its origins in conservative movements in the U.S. It attempts to disqualify feminism as a radical and inflexible ideology. It is linked to similar narratives in other countries in the region.

It seeks to undermine feminism and the LGBTIQ+ community and is linked to radical right-wing movement parties.





## Information pollution

	No pollution	With Pollution
<b>Total Country</b>	<b>293,628</b>	<b>772</b>
1 Do not represent me	814	162
2 Feminazi	33	-
3 Gender=Sex	129	70
4 Marriage= man + woman	541	36
Does not belong to any narrative	292,111	504

A polluted tweet can belong to more than one narrative

The critical narrative about the values of feminism, “Do not represent me”, is the most polluted. The narrative against gender diversity, “Marriage=Male + Female”, also ranks high.



Disinformation



Misinformation



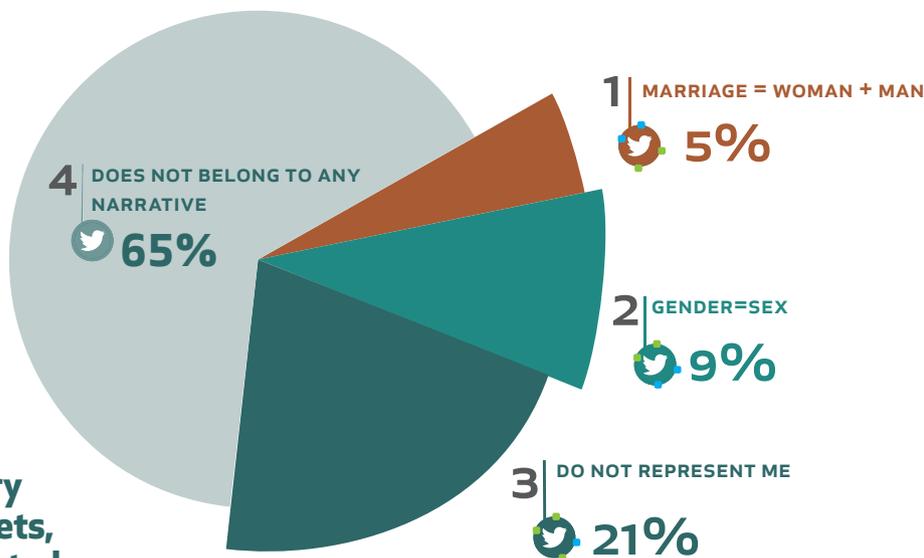
Mal-information

	Disinformation	Misinformation	Mal-information
<b>Total Country</b>	<b>584</b>	<b>47</b>	<b>141</b>
1 Do not represent me	133	-	29
2 Feminazi	-	-	-
3 Gender=Sex	55	-	15
4 Marriage= Man + Woman	-	-	36
Does not belong to any narrative	396	47	61

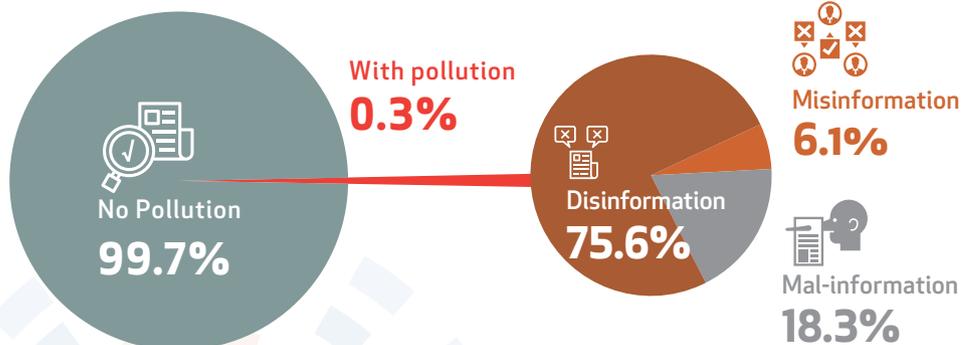
The most frequent form of pollution in the confrontation between conservative and progressive values in Panama is through false accusations of crimes against opponents. Usually these are accusations against feminists or members of the LGBTIQ+ community; however, there are also accusations against conservative religious sectors that are very active against LGBTIQ+ people. It is noteworthy that feminist advocates do not generate or spread information pollution. Therefore, disinformation (false information with intent to harm) is the dominant type of pollution, as seen in the table.



## Proportion of tweets with pollution by narratives



For every 381 tweets, 1 is polluted

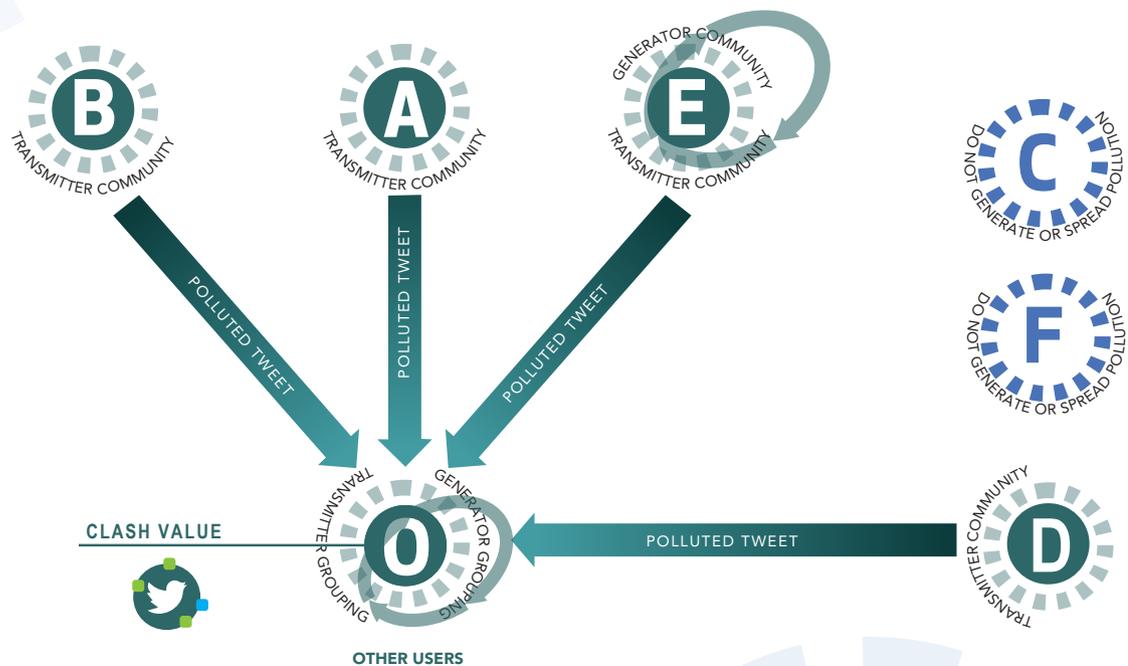




## COMMUNITIES

In the discussion on gender during the pandemic in Panama, six communities and the grouping “Other users” were identified, which brings together isolated users and very small groups of users that do not reach the structure of a community due to their small size. The arc from B to “Other users” indicates that the informative pollution was generated in “Other users” and was relayed by Community B. In other words, the polluted tweet is generated by “Other users”

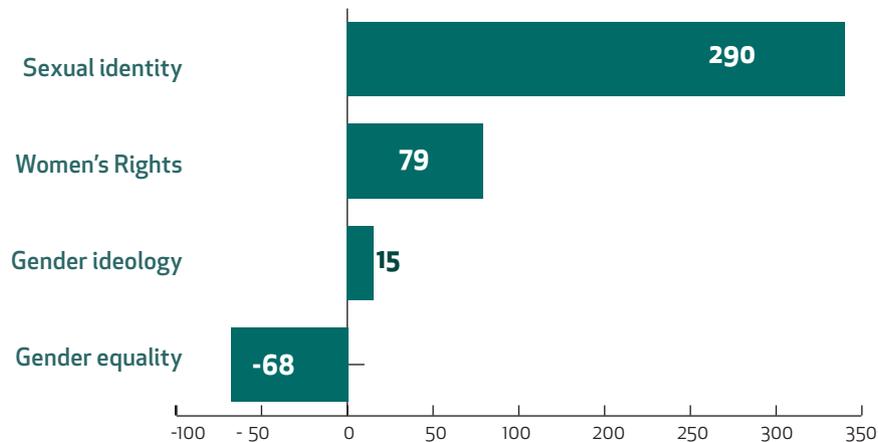
and relayed by B. It is interesting to note that only Community E is a generator of polluted tweets, the rest of the polluted tweets come from the “Other users” grouping. This is a significant difference from the Venezuelan case, where most of the communities generated pollution. However, 4 of the 6 communities spread contamination generated by “Other users”.





## Google Trends

Percentage changes in Google Trends searches  
between the periods June 2019-February 2020 and March-November 2020.



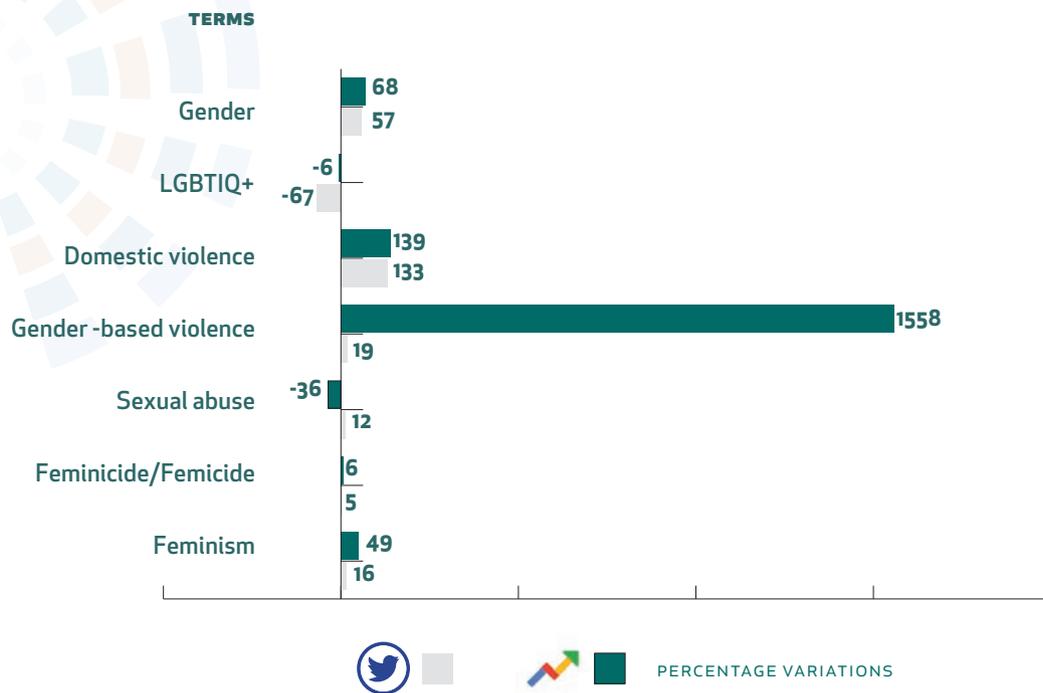
THEMATIC | PERCENTAGE VARIATIONS OF THE THEMES

The variations of key terms of the gender discussion are unequal. The term “gender ideology”, in third place, evidences the very positive attitude of Internet users in gathering information on discussions with information pollution in social networks. Taking advantage of this attitude is one of the recommendations of the specialists to face information pollution.



## Percentage changes in Google Trends and topical searches on Twitter

between June 2019-February 2020 and March-November 2020



The sign (positive or negative) of the variations in Twitter and Google Trends coincide except for the term “sexual abuse”. The negative sign in Google Trends is probably due to the intense search for the term in the first period, motivated by the discussion of a law on sexual abuse of minors in parliament. The large increase of the term “gender-based violence” is striking, which shows the interest of users to be informed about the subject. Unlike the Venezuelan case, Panama’s percentage variations are higher in Google Trends than in Twitter.

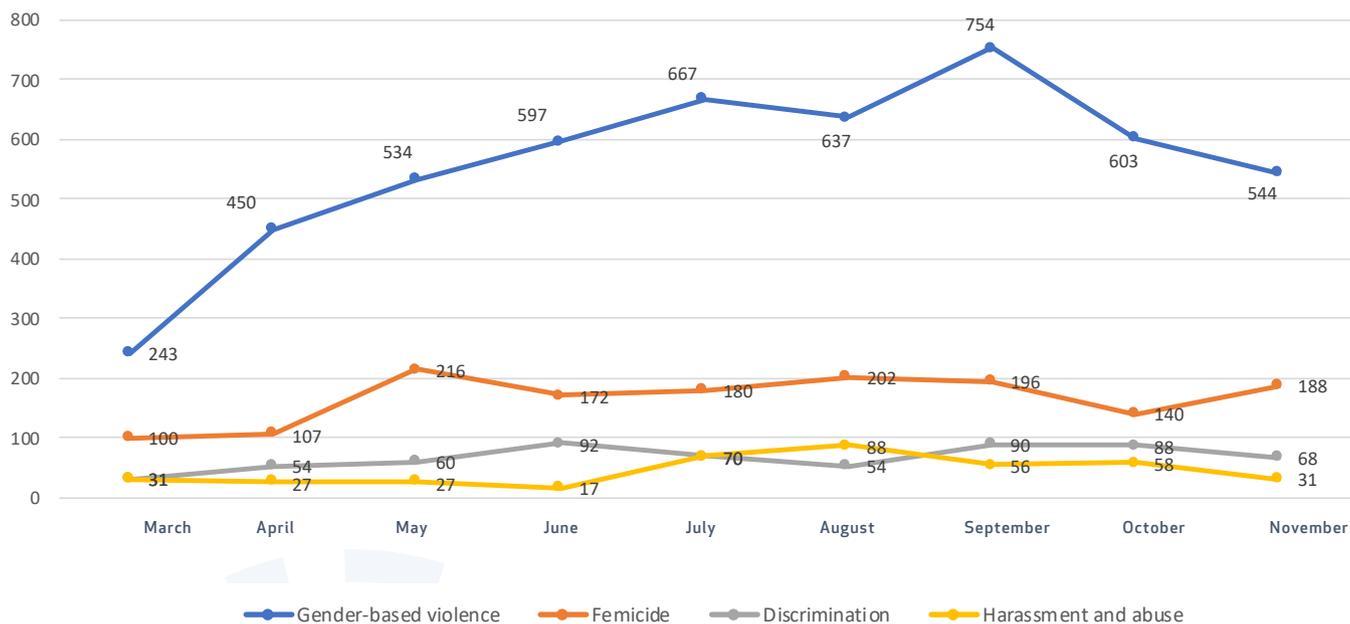


## MEDIA

More than 6,000 news items were consulted following the research narratives, using the Meltwater tool complemented by other internet searches. These media include digital versions of print media and exclusively digital media. Informative and opinion genres were considered.

Much of the information in networks originates from the digital accounts of traditional media, who amplify the information in their digital channels, contributing elements to the conversation in social networks. The media and the journalists who represent them are the main communities where pollution was found.

Media exposure



# COMMUNICATION STRATEGY

---

to mitigate information pollution: Panama case

## → General objective

Establish a communication plan to address the pollution of information generated in social networks, making a communication proposal that makes visible the factors that promote the lack of protection and therefore the violation of the human rights of women and the LGBTIQ+ community.

## → Specific objectives

- Improve and strengthen the messages of prevention and defence of the human rights of the LGBTIQ+ population and women in Panama.
- Identify the key actors and target audiences that will participate in the process to establish a communication strategy for each actor within the plan (women and LGBTIQ+ population, especially trans people).
- Build and reinforce key messages from each community on vulnerability/discrimination (there is a problem - how to tackle it).
- Develop a common campaign (education), with a focus on human rights and an emphasis on sexual diversity.
- Develop crisis/counter-propaganda plan to address information contamination of these issues (thematic mapping - stakeholder mapping and media tier).
- Mitigate the effects of information pollution by addressing stakeholders (stakeholder mapping) and establishing alliances (e.g. civil society organisations - media).
- Support the formation of networks or action groups between women's groups and LGBTIQ+ associations.

## → Target audience

- First level: Women's groups, unions, associations and similar objects of study.
- Second Level: Social communicators (Media Tier).
- Third Level: Strategic allies.
- General public.

## → Action plan

**First phase:** Self-awareness raising, training and recognition (choose two associations as a pilot scheme).

Objective	Approach	Activity	Pieces	Channels	Exposure time	Indicators
<p>Sensitize the vulnerable population (object and subject of study) about the problem.</p> <p>Recognize and address it.</p> <p>Provide internal communication tools.</p> <p>Train pilot organizations on the effects of information pollution and how to combat it.</p>	Internal communication.	Develop workshops for the identification and elaboration of key messages and prepare spokespersons.	<p>Prepare pieces for internal communication: Key messages (frequently asked questions manual), spokesperson manual.</p> <p>Prepare responses for each prospective LGBTQ + scenario or crisis</p> <p>Develop communication manual on Violence, Gender, Human Rights, LGBTIQ+</p>	Internal media: web, newsletter, forum, discussion	1 month	Workshops held Talks, trainings carried out Number of participants.

**Second phase:** advocacy and relationship with stakeholders, including strategic allies

Objective	Approach	Activity	Pieces	Channels	Exposure time	Indicators
	External Communication	<p>Cycle of 1 to 1 interviews, forums, conferences / workshops to position key concepts and messages related to information contamination in the context: Women and violence / Human rights and sexual diversity</p> <p>Training workshops for social communicators in traditional and digital media.</p>	<p>Develop Microsite</p> <p>Activate social networks and promotional channels (WhatsApp and Telegram) for the dissemination of the campaign</p> <p>Produce Graphic Arts: (Banners, post on social media, posters, leaflets, signs, animations)</p> <p>Multimedia Development - Video (campaign) - Jingle, podcast, testimonials.</p>	<p>Web</p> <p>National and local media (TV)</p> <p>Social media</p> <p>Radio</p> <p>Panama Metro</p> <p>Muppi</p> <p>Billboard</p>	2 months	<p>Number of visits to the microsite.</p> <p>Number of views and clics on banners.</p> <p>Number of likes and amount of content shared.</p> <p>Amount of printed material distributed.</p> <p>Number of photographs of exposed material.</p> <p>Number of talks made</p> <p>Number of workshops carried out</p> <p>Interviews with participants</p>

## CONCLUSIONS

---

- During the pandemic, the volume of discussion on gender issues in Panama has increased in a differentiated manner. “Feminism”, “Abuse”, “Gender-based violence”, “Domestic violence” and “Gender” had significant increases. The number of tweets, searches for terms in Google Trends and press releases related to gender increased.
- The main narratives detected are not directly related to COVID-19 and its effects. The narratives are framed in the confrontation of conservative and progressive values in the discussion of gender equality, abortion rights, values promoted by feminist organisations and spokespersons, and recognition of gender diversity and respect for the LGBTIQ+ community.
- Pollution is present in the main narratives detected. The most frequent form of pollution in the confrontation between conservative and progressive values in Panama is through unfounded accusations of murder against opponents. Usually these are accusations against feminists or members of the LGBTIQ+ community; however, there are also accusations against conservative religious sectors that are very active against LGBTIQ+ people. Disinformation (false information with intent to harm) is the dominant type of pollution.
- Feminist advocates do not generate or spread information pollution, despite being victims of pollution.
- Only one community was found to generate pollution, the rest of the information pollution is generated outside the main communities, by isolated users. However, most of the communities retweet polluted tweets.
- Google Trends confirms Twitter trends for almost all the terms considered. Google Trends evidenced the interest of those who have generated this discussion on gender and the very positive attitude of internet users in gathering information about discussions on social networks. Taking advantage of this attitude is one of the specialists’ recommendations for dealing with information pollution.
- All the groups and individuals interviewed are clear about the situation, but have few or no communication tools to address it. This is one of the main reasons why defining an action plan based on a communication strategy can educate the population through digital tools.

## Some comparative comments between Panama and Venezuela

---

- In both countries, discussion and information pollution about the respective vulnerable populations increased with the pandemic. However, only in the Venezuelan case are the main narratives about vulnerable groups directly related to COVID-19.
- In both countries, the debate and information pollution is more aggressive on Twitter than in the media.
- Disinformation is the dominant type of information pollution in both countries.
- The findings in the different sources of information considered do not contradict each other.
- The main cause of information pollution in Venezuela is political polarisation, while in Panama it is the confrontation between conservative and progressive values.
- Both countries have communities of users who do not spread pollution, showing a careful and responsible attitude.
- Levels of political polarisation seem to impact the patterns of generation and propagation of information pollution. The higher the polarisation, the more pervasive the pollution among communities.
- In both countries, the population showed interest in searching the web for information about discussions with information pollution, which is evidence that not all people passively accept information pollution.

# REFERENCES

- Arroyo-Sánchez AS, C. J. (2020).** Infodemia, la otra pandemia durante la enfermedad por coronavirus 2019. *An Fac med.*, 81(2):230-3..
- Blondel, V. D. (2008).** Fast unfolding of communities in large networks. *Journal of statistical mechanics: theory and experiments.*
- Dayter, D. (2015).** Small stories and extended narratives on Twitter. *Discourse, Context & Media*, 19-26.
- Derakhshan, C. W. (2017).** *Information Disorder: Toward an interdisciplinary framework for research and policymaking.* Council of Europe .
- Gupta, V. &. (2009).** A survey of text mining techniques and applications. J, 1(1), . *Journal of emerging technologies in web intelligence*, 60-76.
- Lancet. (17 de July de 2020).** *Editorial.* Obtained from The Lancet Infectious Diseases: [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(20\)30565-X/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30565-X/fulltext)
- Ministry of Popular Power for Foreign Relations. (February 2020).** Obtained from Ministry of Popular Power for Foreign Relations: [http://mppre.gob.ve/wp-content/uploads/2020/02/2020-02-10\\_Bolet%C3%ADn\\_Vuelta\\_a\\_la\\_Patria.pdf](http://mppre.gob.ve/wp-content/uploads/2020/02/2020-02-10_Bolet%C3%ADn_Vuelta_a_la_Patria.pdf)
- Ministry of Popular Power for Foreign Relations. (2020).** *Plan vuelta a la Patria.* Obtained from Ministry of Popular Power for Foreign Relations: <http://www.mppre.gob.ve/temas/vuelta-a-la-patria/>
- OPS. (2020).** *Entender la infodemia y la desinformación en la lucha contra la COVID-19.* Obtained from <https://www.paho.org/es/:https://www.paho.org/es/file/64245/download?token=vqDvd7jC>
- Tardáguila, C. (7 de November de 2019).** Obtained from Poynter: <https://www.poynter.org/fact-checking/2019/against-all-odds-fact-checking-is-flourishing-in-venezuela/>
- United Nations Development Programme. (2020).** *Responding to COVID-19 Information Pollution.* New York: UNDP.
- Zalmout, N. &. (2013).** Multidimensional community detection in Twitter. 8th International Conference for Internet Technology and Secured Transactions (ICITST-2013) (págs. 83-88). IEEE.

## UNDP Country Team

---

### UNDP in Panama



**Manuel Rodríguez.** Communications Specialist of the UNDP Panama Country Office. Specialist in communication strategies. Co-writer of this report. Focal point for Panama.

### UNDP in Venezuela



**Daniel Barráez.** Senior Economist, UNDP Venezuela Country Office. Leader of the project's team of data scientists and drafter of this report. Focal point for Venezuela.



**Ana María Chirinos-Leañez.** Economist, UNDP Venezuela Country Office. Identification of narratives in Panama and Venezuela



**Alejandro Labarca.** Associate Statistician, UNDP Venezuela Country Office. Specialist in computational statistics.



**Wilmer González.** Specialist in machine learning and community identification.



**Manuel Solorzano.** Specialist in natural language processing and Python text mining.



**Silvia Orozco Pabón.** Communications Assistant, UNDP Venezuela Country Office. Agenda development with key actors, media monitoring and communications strategy coordinator in Venezuela.



**Andreína Itriago.** Media and opinion matrix analyst.



**Nirma Hernández.** Communications strategist with emphasis on working with communities.

### UNDP Regional Centre for Latin America and the Caribbean



**Emanuele Sapienza.** Policy Advisor in the area of Governance at the UNDP Regional Centre for Latin America and the Caribbean based in Panama. Specialist in inclusive political processes.