

# VACCINE HESITANCY IN LATIN AMERICA—

Survey of health professionals and  
social media analysis

**2019 Report**



**GLOBAL  
HEALTH  
CONSORTIUM**

**FIU**

Robert Stempel College  
of Public Health  
& Social Work

**FIU**

Steven Cruz Institute  
for Science, Media +  
Technology

## Executive Summary

*Below are key findings of a social media analysis and survey of vaccine hesitancy in Latin America.*

### Social Media Analysis

- **Anti- vaccine sentiment is infrequent** (compared to the U.S) in Latin American Twitter, news, and blog posts, while pro-vaccine sentiment is prevalent
  - ⇒ **#VaccinesWork** was among the **top 5 hashtags**
- From 2018- 2019:
  - ⇒ The total number of mentions of **vaccine keywords increased by 618%**
  - ⇒ The unique **Twitter authors increased by 346%**
- In 2019, the **countries with the highest frequency** of vaccine-related posts were:
  1. Brazil
  2. Argentina
  3. Venezuela
  4. Mexico
  5. Chile
- Close to **80%** of vaccine related Tweets are **either retweets or quotes** (i.e. not original)
- **Facebook Social Echo is over 500 times higher than Twitter** social echo in the top 20,000 Tweets of 2019 (sorted by reach)

### Survey of Health Professionals in Latin America

- Over **70%** of participants are frontline **health care providers** with over **20 years of experience**
- Participants report the **top three sources for vaccine information** among patients as:
  1. Directly from health care providers
  2. Materials from their doctor's office
  3. Local public health services
- **Anti- vaccine misinformation is perceived by respondents as uncommon among patients**, but the two most common were:
  1. "It is better for children not to receive many vaccines at once."
  2. "I am worried about the serious secondary effects of vaccines."
- Participants report that **over 70% of patients follow all vaccine recommendations**:
  - ⇒ 74% of patients follow all vaccine recommendations
  - ⇒ 15% refuse some vaccines and accept others
  - ⇒ 8% strongly resisted vaccines
  - ⇒ 3% completely refuse vaccines
- Most common suggestions for increasing vaccine use among patients:
  1. Educating patients on the benefits of vaccines and dangers of not using vaccines
  2. Improving access to vaccines

# Introduction

## Background and Rationale

Vaccination is widely considered as one of the greatest achievements of public health. While no vaccine is 100% effective, vaccination programs have contributed to a decline in mortality and morbidity and even eliminated various infectious diseases.

However, experts consider that vaccination programs are vulnerable to growing concerns among the population regarding the safety and efficacy of vaccines. Experts estimate that less than 5–10% of individuals have strong anti-vaccination convictions with a greater proportion categorized as being hesitant regarding vaccination. Concerns range from uncertainty regarding some immunizations to refusal of all vaccines.

Given these mounting concerns, it is crucial to develop strategies that increase acceptance and demand for vaccination, which should include ongoing community engagement and trust building, communication strategies, active hesitancy prevention, regular national assessments of concerns, and crisis preparedness and response planning.

## *Objectives*

- Create awareness of the Global Health Consortium and its partners, as well as and the targeted public health issues among public and educators and practitioners in global health.
- Build an online presence across social media platforms to increase web traffic, develop positive discourse related to global public health
- Position the Global Health Consortium as a thought leader in public health, underscoring its pillars, and the targeted health issues (AMR, Immunizations, and arbovirus).
- Establish online events and activities to increase audience engagement and awareness of GHC's (and partners') campaigns

## CARTA GHC Partnership

### *Social media— Development of a Communication Platform*

In collaboration with the FIU School of Communication, we will develop a Communication platform to address vaccine hesitance and communicate on the value of vaccination. We will also develop a social media platform in conjunction with the Global Health Consortium and experts from the Region to communicate on the real value of vaccination programs.

### *Journalism Training Program*

In collaboration with the School of Journalism, we will develop a two and a half FIU certificate journalism-training course. This annual course will offer practicing journalists an opportunity for training / credentialing by FIU and global experts. We expect the program to become an excellent resource for members as well as a place to publish relevant stories/podcasts/videos produced by the organization's members.

## Situation Analysis: Social Media listening

Using social media monitoring tool Meltwater, millions of 2019 Twitter, news, and blog posts containing vaccine-related terms were analyzed for reach, engagement, and influencer counts as well as other insights including top countries, hashtags, and keywords. Analysis of Facebook and Instagram posts were limited as a result of privacy policies.

### Methods

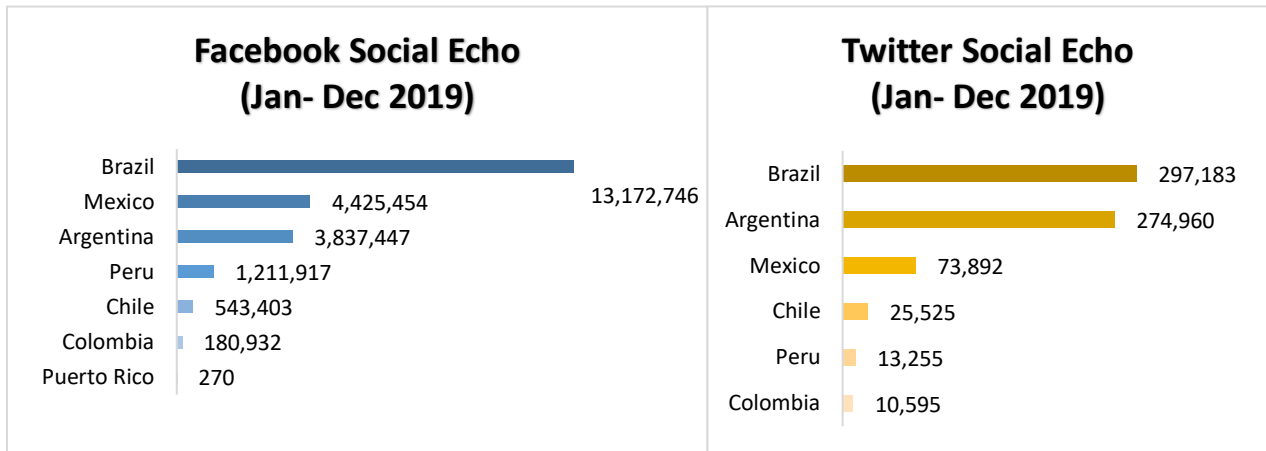
Using the Meltwater “Explore” feature, which allows users to search across multiple media types at once, English, Spanish, and Portuguese vaccine-related terms (Table 1) were used to capture Twitter, news, and blog posts discussing vaccines in Latin American countries. Posts were filtered by country to only include results from Argentina, Brazil, Mexico, Venezuela, Chile, Peru, Colombia, Ecuador, Paraguay, Uruguay, Guatemala, Panama, El Salvador, Puerto Rico, Bolivia, Cuba, Dominican Republic, Costa Rica, Honduras, and Nicaragua.

Table 1- Meltwater Search Terms	
At least one of these	None of these
vaccine*, vacun*, vacin*, inmunid*, inmunit*, HPV, VPH, influenza, measle*, sarampion	veterinari*, cachorr*, adopt*

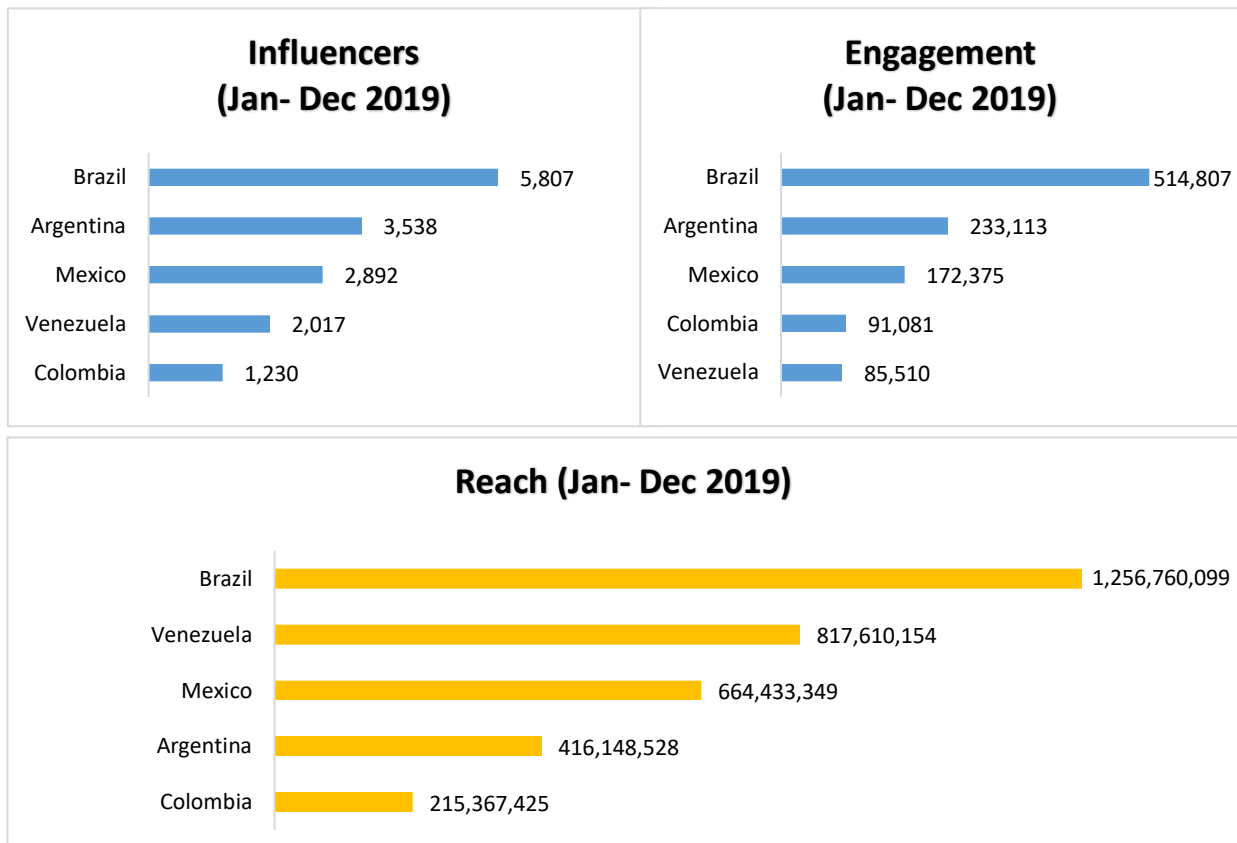
In addition to analysis available through Meltwater insights (e.g. top countries, total mentions, top hashtags, etc.), the top 20,000 posts from 2019 in order of 1) reach and 2) engagement were downloaded to excel (i.e. two separate downloads with 20,000 posts) for further analysis including reach, engagement, and social echo. Social echo refers to real-time number of social shares for any editorial document, reach refers to an estimate of the potential viewership of a post, and engagement refers to post involvement measures such as likes, comments, and shares.

## Results

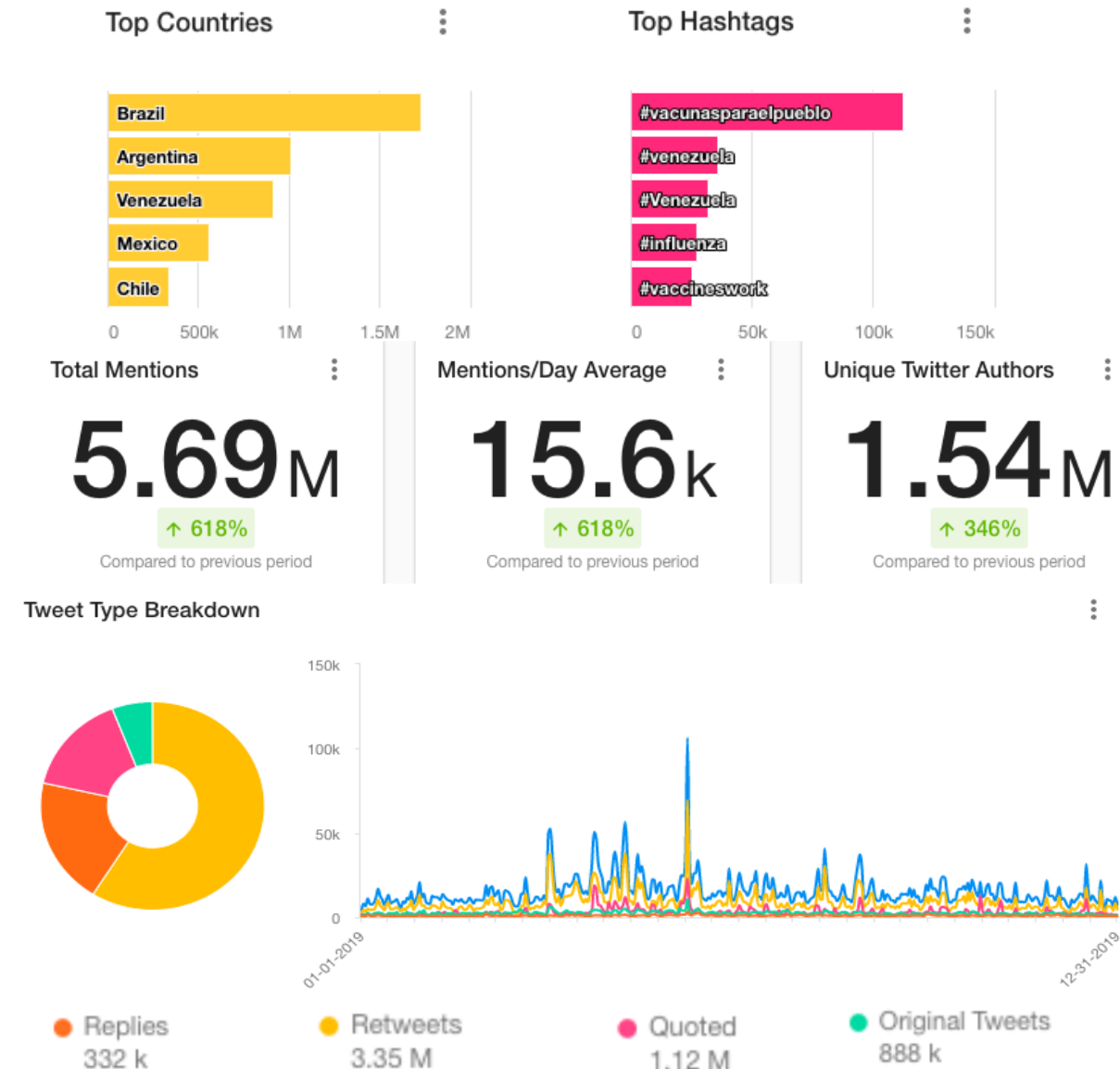
### Top 20,000 2019 Tweets in order of reach



### Top 20,000 2019 Tweets in order of engagement



## Meltwater Insights



## Situation Analysis: Survey of Health Care Providers

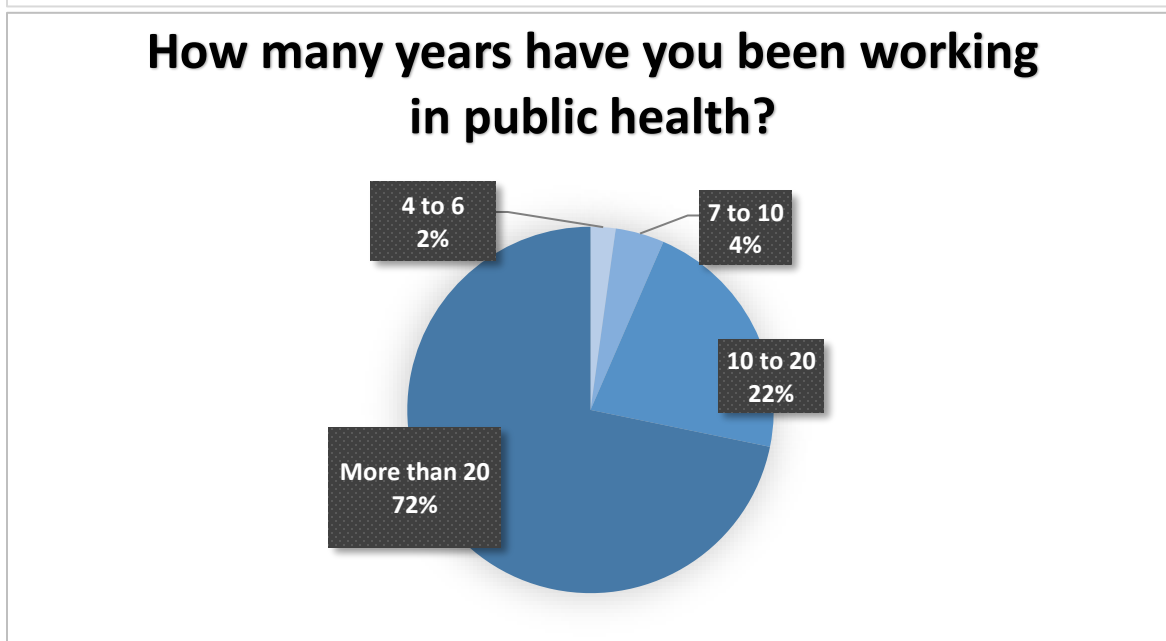
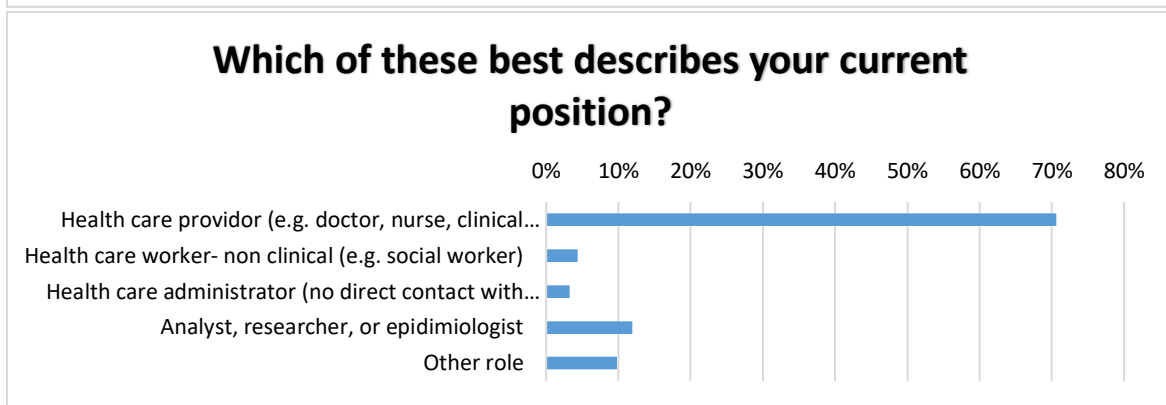
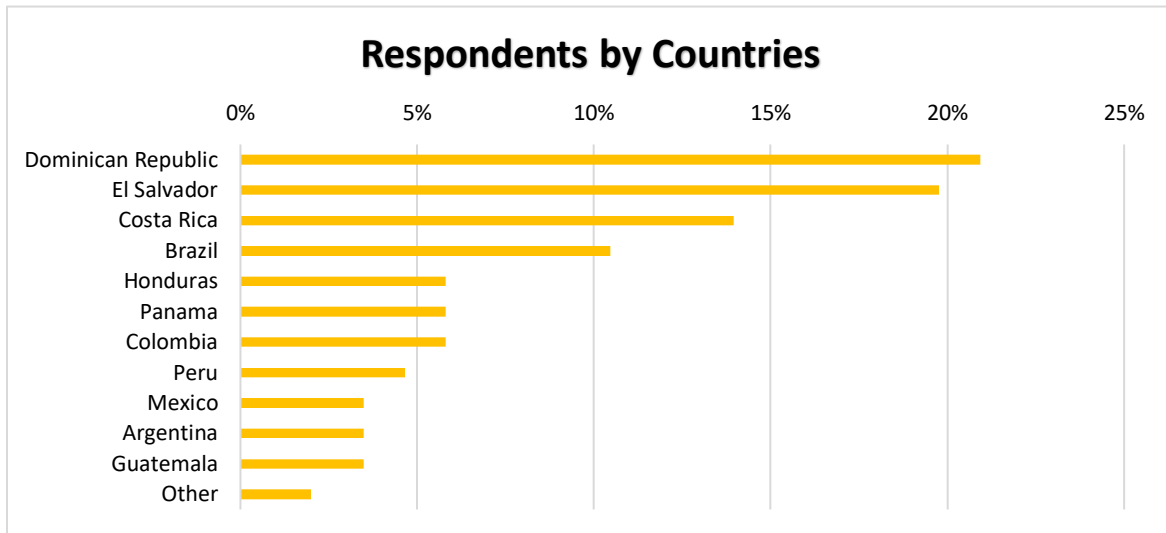
An online survey was distributed to health workers through an established network of participants in GHC conferences. The purpose of the survey was to obtain insights on health providers' perspectives about existing beliefs and possible reasons for vaccine hesitancy in Latin America.

### Methods

An online Qualtrics survey was distributed via email to 50 health workers through an established network of participants in GHC conferences, who were encouraged to share the survey to fellow health workers in Latin America. A total of 149 usable responses were collected between November 7 and December 16, 2019. Survey results were analyzed using SPSS.

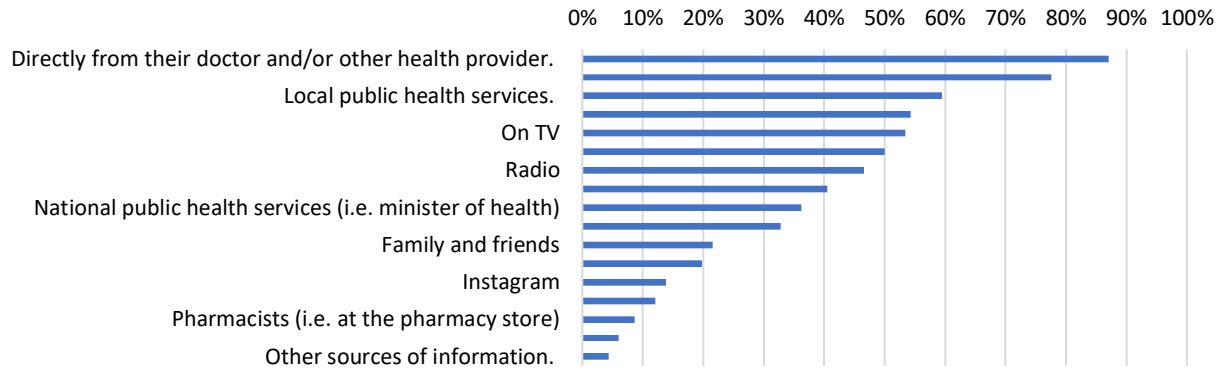
## Results

### Description of Participants

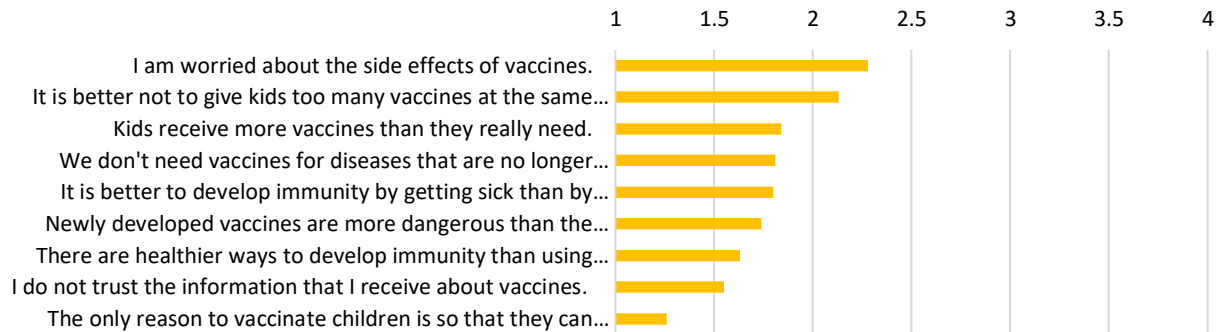


Perceived Vaccine Hesitancy Among Patient

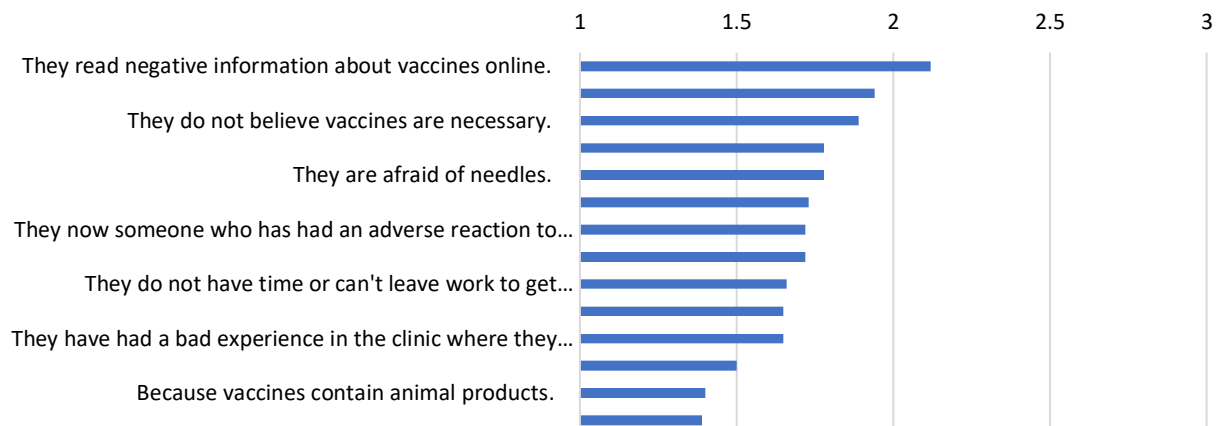
**Where do patients in your community seek vaccine information?**



**How common are these ideas among patients? (1-4 Scale)**

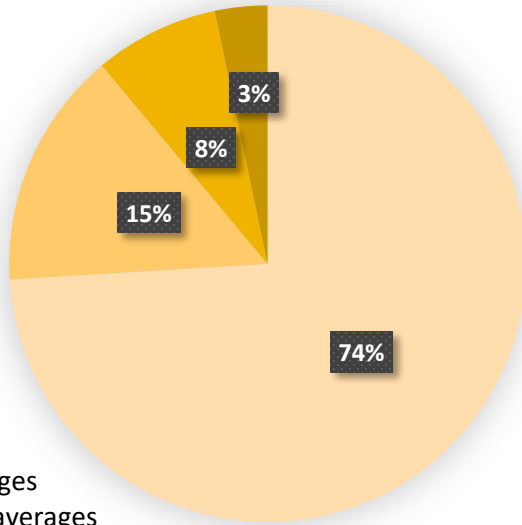


**Those who reject vaccines...why? (1-3 Scale)**





## What percentage\* of your community...



- Follows all vaccine recommendations
- Hesitates with vaccine use (i.e. accepts some vaccines and rejects others, tries not to use too many)
- Resists vaccine use (i.e. are willing to listen to vaccine information, but have serious doubts)
- Completely reject vaccine use and vaccine information

\*Percentages based on averages

### Suggested Solutions

In an open-ended question, survey participants were asked to propose solutions to increase vaccination in their communities



*“Have local insurers cover vaccination in children from infancy to older ages. The segment in my community that is partially vaccinated do not trust the ministry's vaccines, but they do not have the budget to keep up with their children's vaccination schedule.”*

## Conclusions and Campaign Recommendations

### Conclusions

- Anti-vaccine sentiment is not as strong in Latin America as it is in the U.S., but it does exist and merits intervention
- The largest barrier to vaccination in Latin America continues to be access according to health professionals
- Hearing about adverse reactions is a deterrent, even when reactions are not related to vaccine use
- More information about differential use of different social media platforms is needed, particularly Facebook

### Recommendations

- Messaging could focus on self-advocacy and understanding urgency of vaccination
- Recommended campaign themes:
  1. Highlight the risks of non-vaccination
  2. Guidance on communicating with anti-vaxxers
  3. Providing credible sources for vaccine information
- Because people are using social media to communicate about vaccines, pro- vaccine social media influencers can be used as a tool for sharing information and engaging audiences

# Global Health Consortium

Instagram + Twitter: @GHCFIU

Facebook: @FIUGHC

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