Challenges and Opportunities in Vaccinating at Risk Communities

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Introduction

- Minority groups face significant disadvantages in vaccination access, and within these, men tend to be more reluctant to getting vaccinated.

- Fear, misinformation and polarization on health issues has worsened since the start of the COVID-19 pandemic.

- This has caused the willingness to get vaccinated to decrease.

- Many times, those who get vaccinated the least are those who need it the most.

Don't ask the elm for pears
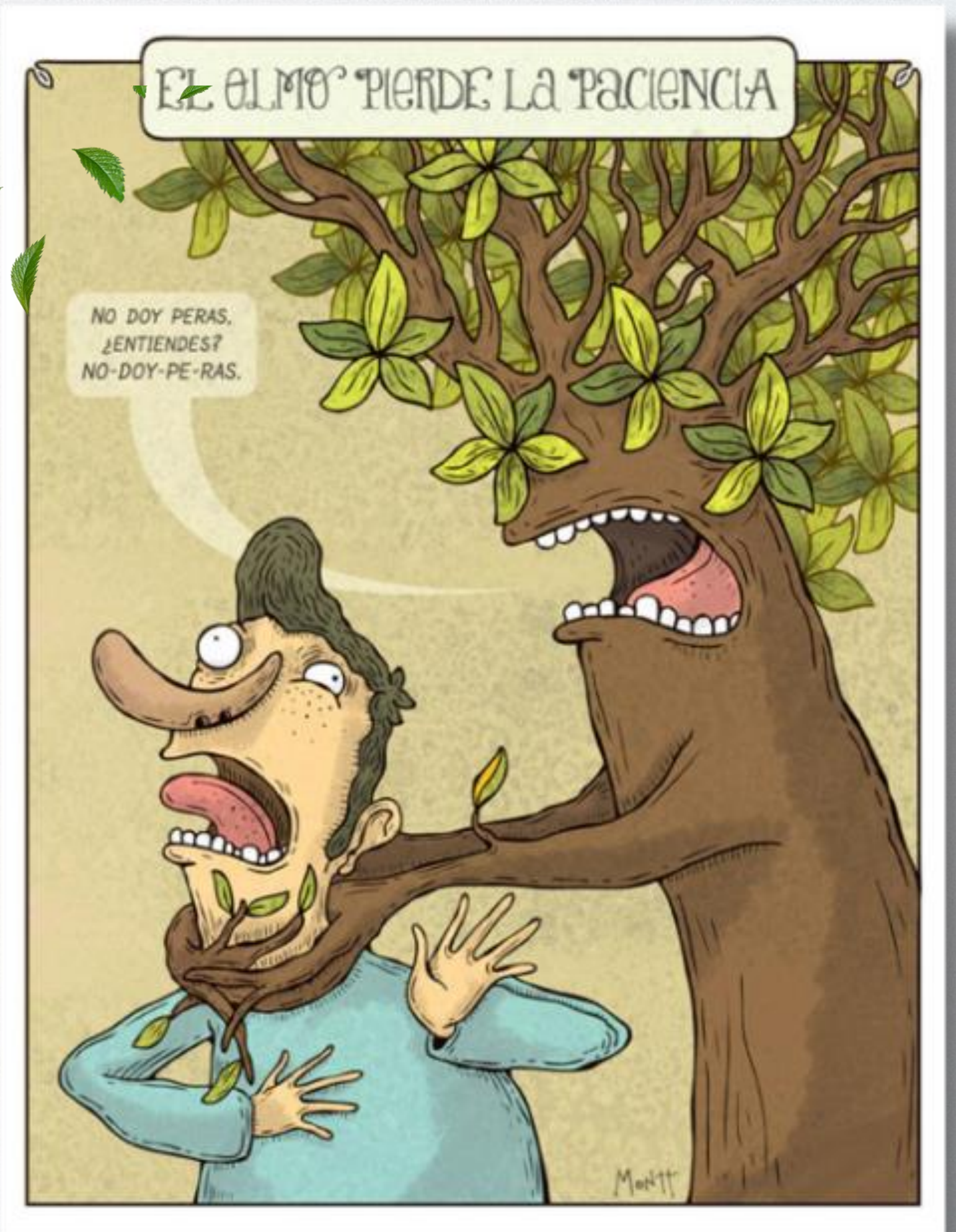
COVID-19 vaccine uptake and barriers among Indigenous language speakers in Mexico: Results from a nationally representative survey

Lucía Abascal Miguel [1], Cesar A Mendez-Lizarraga [1], Elizabeth M Rojo [1][2], Jaime Sepúlveda [1]

Affiliations + expand
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Evaluating the impact of a linguistically and culturally tailored social media ad campaign on COVID-19 vaccine uptake among indigenous populations in Guatemala: a pre/post design intervention study

Lucía Abascal Miguel [1], Emily Lopez [2], Kelly Sanders [3], Nadine Ann Skinner [4], Jamie Johnston [4], Kathryn B Vosburg [3], Anne Kraemer Diaz [2], Nadia Diamond-Smith [3][5]

Barriers to COVID-19 vaccine acceptance to improve messages for vaccine uptake in indigenous populations in the central highlands of Guatemala: a participatory qualitative study

Nadine Ann Skinner [1], Kelly Sanders [2], Emily Lopez [3], Magda Silvia Sotz Mux [3], Lucía Abascal Miguel [2], Kathryn B Vosburg [2], Jamie Johnston [4], Nadia Diamond-Smith [2][5], Anne Kraemer Diaz [3]

Barriers and Enablers to COVID-19 Vaccination in San Francisco's Spanish-Speaking Population

Lucía Abascal Miguel [1], Canice Christian [1][2], Erin C Accurso [3], Adriana Najmabadi [4], Priyanka Athavale [5], Jody A Diala [1], Darpun Sachdev [6], Susan Philip [6], Michael J Reid [1][4][2], Margaret A Handley [5][7]

Barriers to vaccination- Spanish speakers in San Francisco

- Latino populations were disproportionately affected by COVID-19, especially those not born in the US, yet specific barriers and access to health and prevention behaviors are poorly understood.

- 3 Main objectives:

  - Identify and understand ongoing modifiable barriers to COVID-19 preventive measures, including vaccination.

  - Identify intervention options that can increase uptake of COVID-19 vaccines.

  - Inform the development of local and regional policy interventions to address identified barriers, through a series of recommendations derived from the study findings.

San Francisco
California
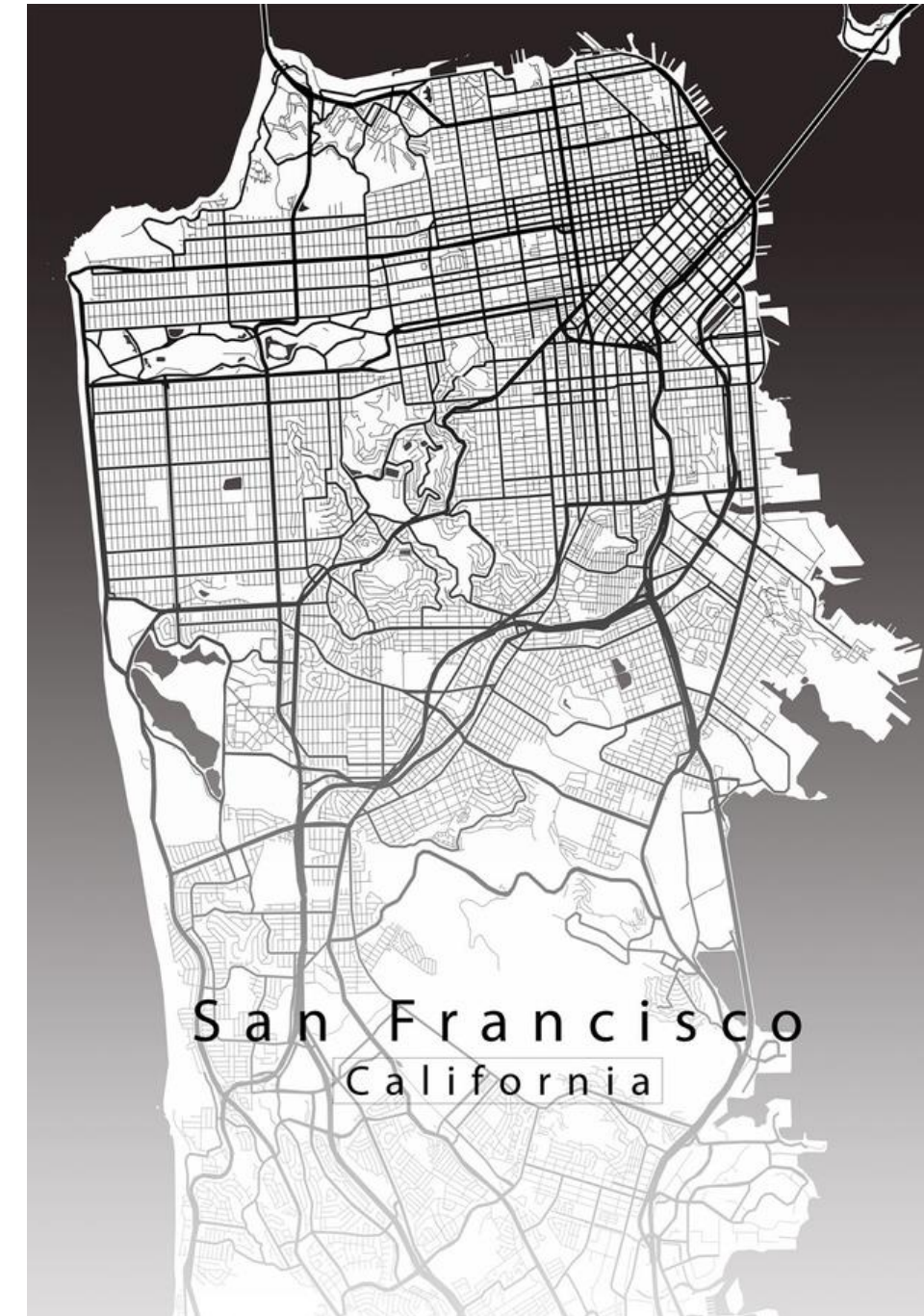
FINDINGS: System-level barriers

- **Poor preparation of systems and lack of coordination between system actors**
  - Access to the vaccine was "chaotic" and vaccination sites were unable to provide information about other options when they were unable to provide the vaccine on site.

  - Strict eligibility criteria created confusion about who qualified and when

- **Physical environment:**
  - Vaccination sites may be difficult to access for people with disabilities or other health problems and their caregivers.

- **Social environment:**
  - Vaccine norms also played a key role in participants' decision to receive or avoid the vaccine. Having family members who have not been vaccinated and being part of a group that opposes vaccination were factors that influenced individual decisions to postpone or refuse vaccinations.

 - Transnational social media information affects acceptance in the US

FINDINGS: Barriers at the individual level

- Poor or limited understanding of vaccine safety and effectiveness exacerbated by conflicting information from different sources, which created confusion and impeded their ability to make decisions about the vaccine.

- The role of social media as a source of information and misinformation.

- Systems that rely on technology for information and programming are at odds with the reality of limited general literacy and technological literacy of high-risk groups.

- Health concerns that reduced the motivation for vaccination, including the fear of immediate and long-term side effects, and concerns that the vaccine would not protect against new variants.

- Concerns about legitimacy regarding the speed with which vaccines were produced and approved (too quickly) and the possible deceptive role that the government could have played

Recommendations
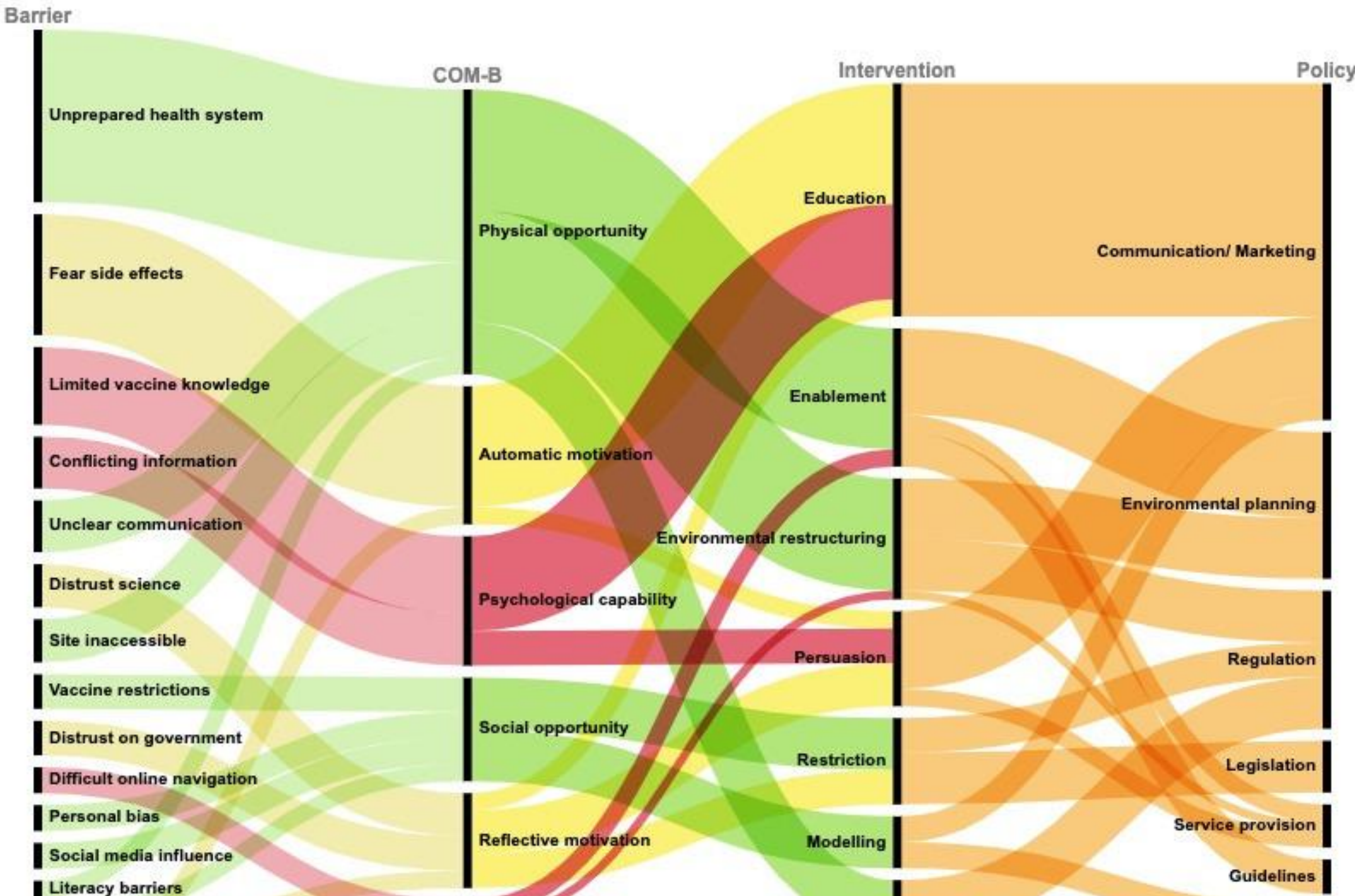
Indigenous Populations in Mexico – COVID-19 vaccine, ENSANUT 2022

- In this study, we used publicly available data from Mexico's nationally representative survey, ENSANUT Continua 2022, to examine COVID-19 vaccine uptake among Indigenous language speakers.

- The main variables that informed our study were:

  1. Have received at least one dose of the COVID-19 vaccine.
  2. Reason for not getting the vaccine.

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Results ✓

- Our analysis of unvaccinated individuals found that those who spoke an indigenous language were more likely to report being unvaccinated due to negative beliefs about the vaccine or fear.

- Men were 20% less likely to have at least one dose compared to Indigenous Women.

- We also found that they were less likely to face barriers when accessing the vaccine compared to those who did not speak an indigenous language, challenging the common idea that indigenous people are not vaccinated primarily because of a lack of access to health care.

Reasons not to get vaccinated

Razón para no recibir la vacuna COVID-19	Total (n=6,582)	No hablan lengua indígena (n=5,918)	Sí hablan lengua indígena (n=664)	Valor P
La vacuna no ha llegado donde vivimos	992 (15%)	920 (16%)	72 (11%)	0·00**
Estaba muy lejos para mí	66 (1%)	48 (1%)	18 (3%)	0·00**
La fila era muy larga	222 (3%)	208 (4%)	14 (2%)	0·07
No me dejaron salir del trabajo	119 (2%)	111 (2%)	8 (1%)	0·28
Tengo una discapacidad	32 (0·5%)	32 (0·5%)	0	0·11
No tenía a nadie que me acompañara	133 (2%)	125 (2%)	8 (1%)	0·15
No tuve tiempo	682 (10%)	624 (10%)	58 (9%)	0·17
Estaba enfermo o debido a alguna enfermedad	399 (6%)	370 (6%)	29 (4%)	0·06
Creo que la vacuna es ineficaz	651 (10%)	551 (9%)	100 (15%)	0·00**
Creo que la vacuna tiene efectos adversos/consecuencias negativas para mi salud	994 (15%)	866 (15%)	128 (19%)	0·00**
El COVID no es un problema, no existe	154 (2%)	134 (2%)	20 (3%)	0·28
Prefiero esperar y ver cómo progresan las cosas	168 (3%)	161 (3%)	7 (1%)	0·01*
No confío en el sistema, el gobierno	247 (4%)	229 (4%)	18 (3%)	0·17
Por miedo	1,188 (18%)	1,047 (18%)	141 (21%)	0·03*
Otra	535 (8%)	492 (8%)	43 (7%)	0·12

# Barriers to COVID-19 Vaccination, Indigenous People in Guatemala

- Qualitative study:

- We found three major general barriers to vaccination within the sampled population:

- (1) a lack of information about the COVID-19 vaccine that is easily understandable, linguistically appropriate, and culturally sensitive;

- (2) vaccine access and supply issues that prevented people from getting vaccinated efficiently and quickly; and

- (3) widespread misinformation and disinformation that preyed on people's fear of the unknown and distrust of the medical system and government.

BMJ Open **Barriers to COVID-19 vaccine acceptance to improve messages for vaccine uptake in indigenous populations in the central highlands of Guatemala: a participatory qualitative study**

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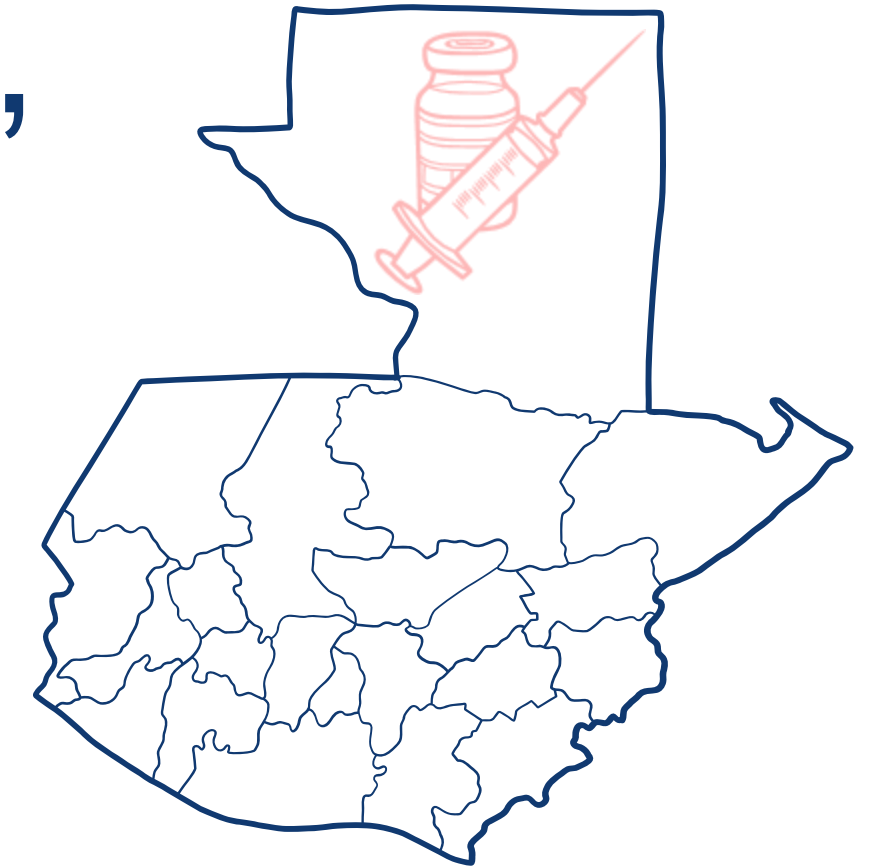
- Quantitative study:

- Reasons for not getting vaccinated:

    ○ The most common reasons given by unvaccinated people for not wanting a COVID-19 vaccine were fear of side effects (30%), fear of dying from the vaccine (19%), and lack of information about vaccines (10%).

    ○ Another misperception that participants mentioned was the idea that having a comorbidity, such as diabetes or being pregnant, meant that they were not eligible for vaccination or that vaccination was not safe for them.

Intervention

¿Jachike taq q'oxowem kana'o are taq kakojtaj le toqo'j kunanik q'ateb'al uwach le covid-19?

Results

Brand Lift Results: Percent preferred response to social norms and safety questions
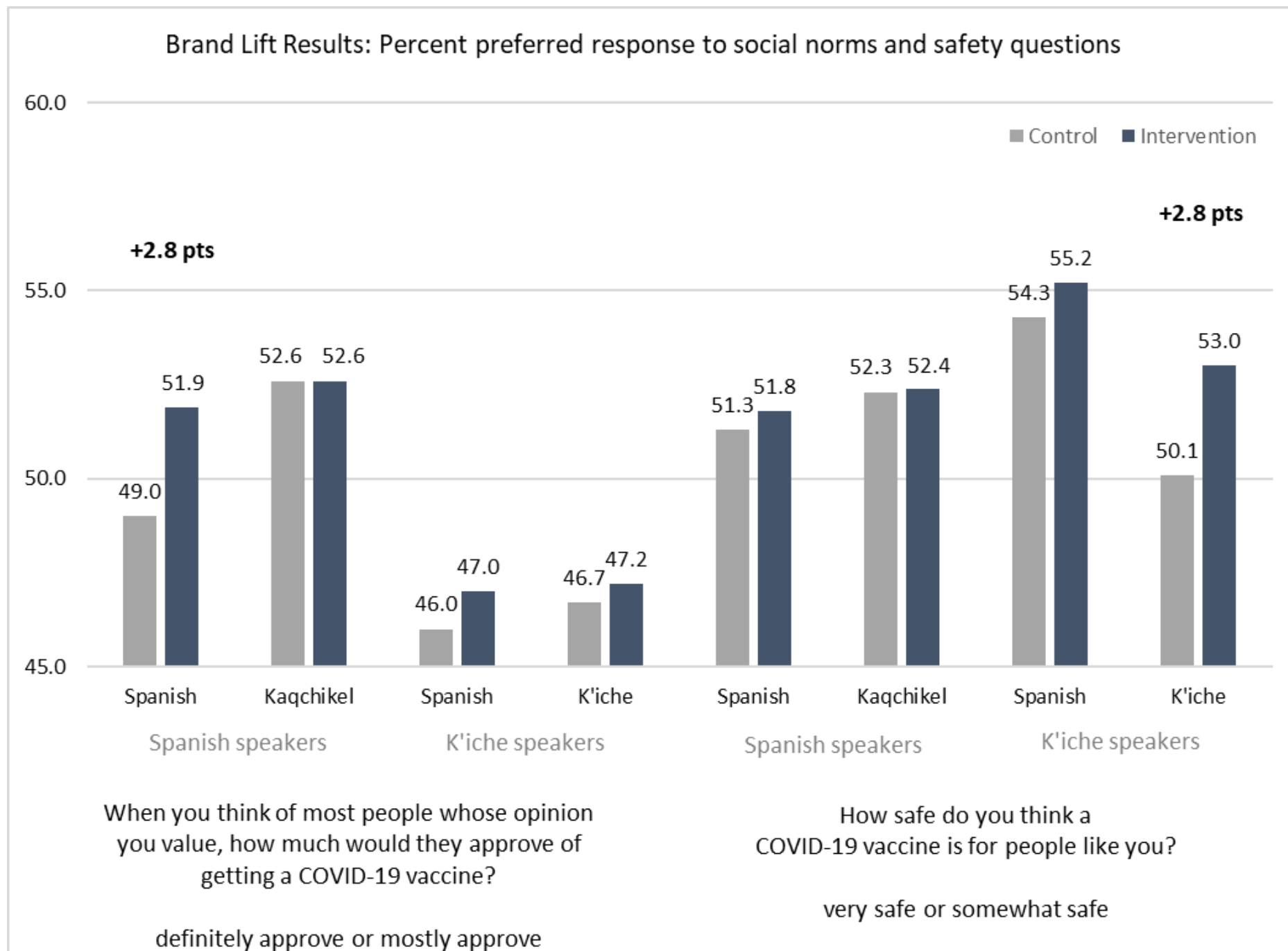
- The videos appear to improve the perceived safety of vaccines in the K'iche-speaking group (statistically significant with a 2.8% increase, OR = 1.12, 95% CI 0.95-1.32).

- A 2.8% increase in the intervention group with Spanish-language videos suggests that Spanish-language videos may have improved the perceived acceptability of COVID-19 vaccines (although not statistically significant, OR = 1.12, 95% CI 0.99-1.27).

- Facebook considers a 2% increase to be statistically significant and evidence of a successful ad campaign, which we did!

Results

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- Those who reported watching the videos were 1.78 times more likely (95% CI 1.14 to 2.77) to get vaccinated.

- Our findings suggest that culturally and linguistically adapted videos addressing COVID-19 vaccine misinformation, shared on social media, may increase vaccinations in a rural and indigenous population in Guatemala, implying that social media content may influence vaccination uptake.

- Providing accurate and culturally sensitive information in local languages from trusted sources can help increase vaccine uptake in historically marginalized populations

Conclusions

- Our findings underscore the importance of:

  - Provide vaccine information that is culturally and linguistically appropriate.\

  - Address the barriers to access and misinformation.

- Studies conducted in the U.S., Mexico, and Guatemala consistently show that:

  - Targeted strategies can make a significant difference in vaccine acceptance among minority populations, including Spanish-speaking and indigenous communities, and within these communities, men.
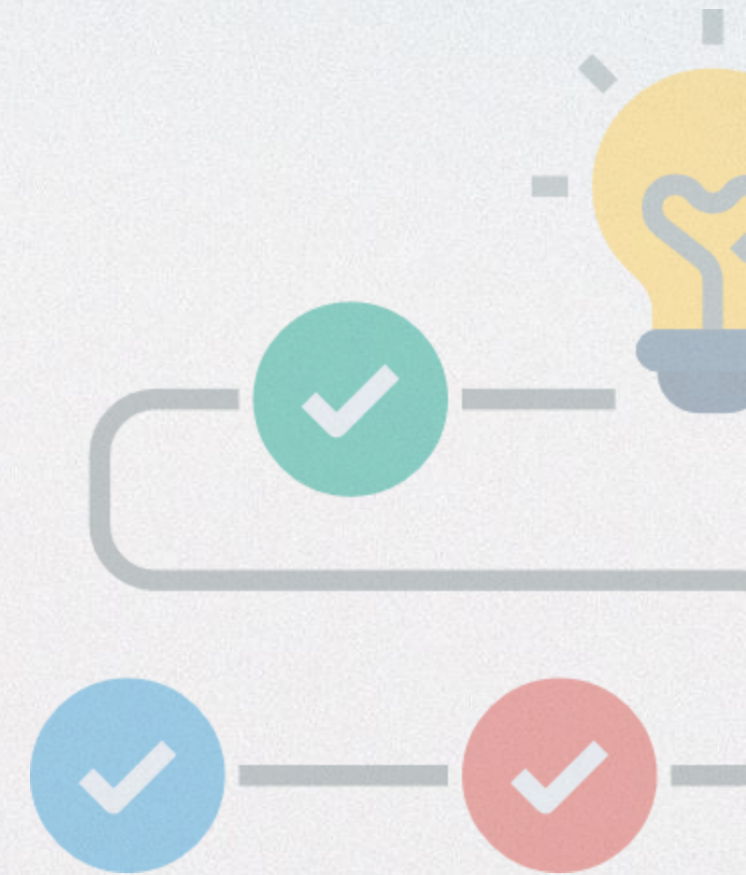
Next steps

- Project with Indigenous migrants in California to understand what type of public health information, specifically vaccination, works best.

- New national campaign for childhood and HPV vaccination in Guatemala