A close-up photograph of a woman with a grey headband holding a young child. The woman is looking towards the right with a serious expression. The child is looking towards the camera with a slight smile. The background is a blurred blue wall.

Impact of the Pandemic: The vaccine information environment

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unicef 

| for every child



infodemic: an overabundance of information—some accurate and some not—that occurs during an epidemic. [Which] can lead to confusion and ultimately mistrust in government and public health response
—World Health Organization



3X increase in global English language vaccine-negative messaging in Dec 2020 versus pre-pandemic

15 Billion views from March – Dec 2020

Misinformation and opposition occupy a small but growing part of vaccine conversations

The US is the wellspring of most misinformation



March 2022 to March 2023

- 7% of all vaccine conversations anti or misinformation
- Versus only 2.5% March 2021 to March 2022 (= billions more views)
- 71% of all English- and Spanish-language vaccine misinformation online originated in the US
- Majority of misinformation relates to COVID-19 vaccines still, with spikes on misinformation on HPV and Polio vaccines
- RSV vaccines are now becoming a focus of misinformation



X (formerly known as Twitter)

- From 18K to 40K vaccine negative posts after Musk takeover
- Highest spikes of misinformation came following end of Twitter's COVID-19 misinformation policy

Misinformation can influence behaviors

Vaccine misinformation has real world consequences

Multi-country study (n=40)¹

- Strong association between perceived believability of COVID-19 misinformation and vaccination hesitancy
- Higher incidence and influence of misinformation in LMICs

Conversely, an ability to detect misinformation may be associated with higher vaccine acceptance²

Source: 1. Singh K, Lima G, Cha Met al. Misinformation, believability, and vaccine acceptance over 40 countries: Takeaways from the initial phase of the COVID-19 infodemic. PLoS One. 2022 17(2):e0263381.

2. Whitehead HS, French CE, Caldwell DM, et al. A systematic review of communication interventions for countering vaccine misinformation. Vaccine. 2023;41(5):1018-1034.

**THE COVID-19
PANDEMIC AND
ACCOMPANYING
INFODEMIC HAVE
NEGATIVELY
AFFECTED VACCINE
UPTAKE**



However, the pandemic has had both positive and negative effects on vaccine acceptance, depending on the context and vaccine.

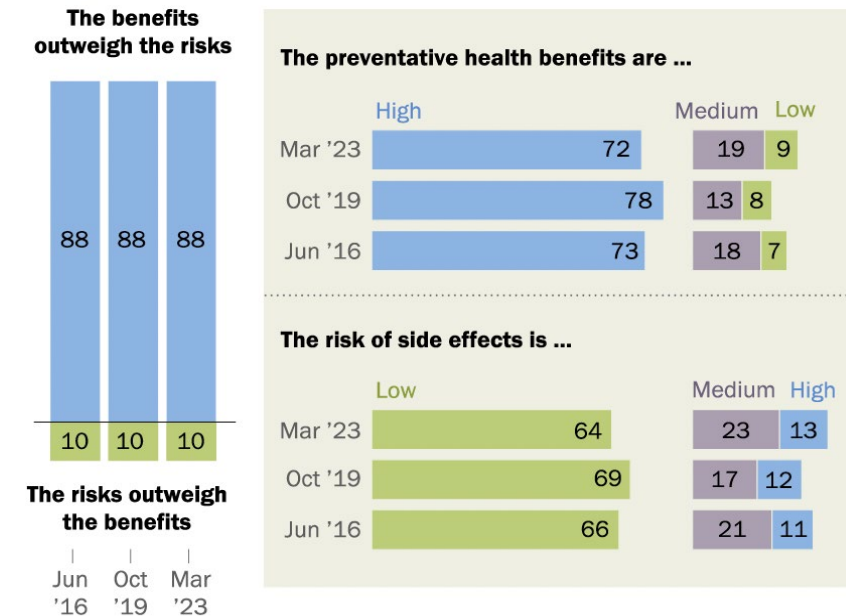
Most Americans still trust childhood vaccines

Study March 2023

Adults with highest trust in their HCP had highest confidence in MMR & least concerns about side effects

“Challenges finding trustworthy information”

% of U.S. adults who say the following about childhood vaccines for measles, mumps and rubella (MMR)



Note: Respondents who did not give an answer are not shown.





Source: Survey conducted March 13-19, 2023.

“Americans’ Largely Positive Views of Childhood Vaccines Hold Steady”

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Determinants of vaccine acceptance

The COVID-19 pandemic has led to the emergence of some new determinants of vaccine acceptance and certain others have become more important.

	 THOUGHTS, FEELINGS	 ATTITUDES, COGNITIVE BIASES	 TRUST, SOCIAL NORMS, BELIEFS, EXPERIENCES, FEARS	 MORAL VALUES, IDEOLOGY, IDENTITY, WORLDVIEW
Disease salience <i>Vaccines are victim of own success.</i> When disease is less visible disease it is less relevant for people.	Motivated reasoning <i>We see what we believe rather than believe what we see.</i> We seek info reinforcing our beliefs & ignore belief- conflicting info	Social norms Our behavior is influenced by what we think others like us are doing or what we think others expect of us	Moral value - Purity Concerns with sanctity, chastity & avoiding contamination (spiritual & metaphorical) of oneself	
Perceived susceptibility Personal feelings of vulnerability & likelihood of catching disease	Loss aversion People are more affected by losses than gains	Trust In vaccines, providers & institutions	Moral value - Liberty Belief in the rights of the individual	
Disinformation Exposure to vaccine disinformation can decrease vaccine acceptance	Omission bias Fear of causing harm by acting is greater than that by not acting	Religious beliefs Religious beliefs may be perceived as precluding vaccination	Worldview Conspiratorial thinking is associated with vaccine hesitancy	
Information gaps If people cannot find reliable information, concerns may turn to hesitancy	HCP recommendation A recommendation from a healthcare provider is consistently correlated with vaccine acceptance	Past health experiences A previous poor experience with the health system may decrease intention to vaccinate	Political affiliation Emerged as a correlate of vaccine acceptance for the first time during COVID-19	
Selective vaccine hesitancy Hesitancy to accept specific vaccines (or vaccine manufacturers)				

Trust

Of all pandemic-preparedness indices only high levels of **government and interpersonal trust**, as well as less government corruption, were associated with higher COVID-19 vaccine coverage¹

Lack of trust in health professionals and low confidence in domestic and international health institutions was consistently associated with COVID-19 vaccine hesitancy²

Source: COVID-19 National Preparedness Collaborators. Pandemic preparedness and COVID-19: an exploratory analysis of infection and fatality rates, and contextual factors associated with preparedness in 177 countries, from Jan 1, 2020, to Sept 30, 2021. Lancet. 2022 Apr 16;399(10334):1489-1512. Rozek LS, et al. Understanding Vaccine Hesitancy in the Context of COVID-19: The Role of Trust and Confidence in a Seventeen-Country Survey. Int J Public Health. 2021;66:636255.

We live in a noisy information environment and are constantly receiving information through different channels.



How we experience information (offline) is affected by



Access to media platforms and information sources may be limited or expensive



Literacy skills affect how well someone can navigate and understand information



Social norms and networks affecting who should access different types of information and why (gender barriers)



Language used to share information can affect whether and how audiences engage with the content

How we experience information (online) is affected by



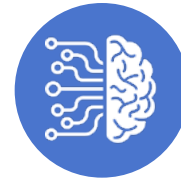
Access to media platforms and information sources may be limited or expensive



Form of internet access, whether on smartphone or computer or a basic device



Social norms affecting who should access different types of information and why (gender barriers)



Literacy skills affect how well someone can navigate and understand information

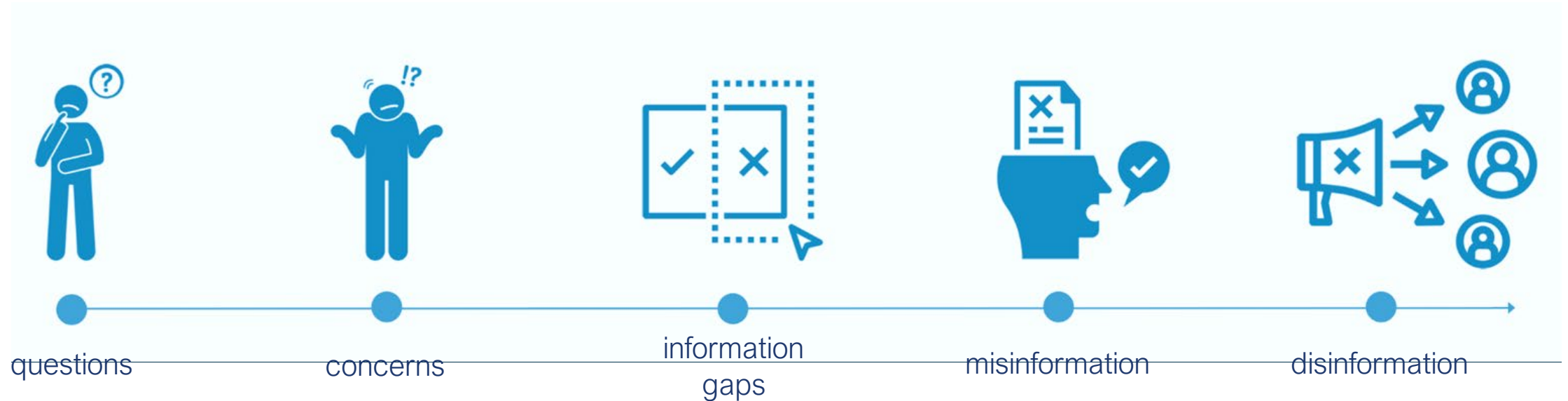


Algorithms affect what information we see; we are likely to see content designed to grab our attention (e.g. shock, outrage)



Language used to share information can affect whether and how audiences engage with the content

Information ecosystems consist of more than just the facts



“ *Most people are not truly resistant to immunisations, they largely want clarification and reassurance from trusted reliable sources.¹* ”

What does a **healthy information environment** look like?

(“infodemic resilient”)

- **Access** : People can access quality health information
- **Awareness** : People know where to seek and find credible health information
- **Literacy** : People understand health information (health literacy)
- **Amplification** : People share credible health information (and positive health experiences)
- **Discernment** : People know how to identify and address misinformation (media/digital literacy)
- **Influence** : Social norms support healthy behaviors
- **Trust** : People get their information from trustworthy sources
- **Acceptance**: People accept important preventative health behaviors

UNICEF's Social Listening/Misinformation Management Strategy

Promote healthy information ecosystems by reducing the harm of misinformation, improving access to health information, and driving confidence and demand in life saving vaccines for children and communities.



The Information Environment

Nurture a healthy information environment.



The Health System

Support resilient health systems against infodemics.



Communities

Empower communities to seek and use health information to protect children's health.



Social Behaviour Change Communications

To design effective vaccine behaviour change communications, we must:



Understand the root causes of under-vaccination in context.

Effective vaccine communications strategies require an understanding of the particular social and psychological factors that determine the vaccine decisions of communities.



Design content that responds to these insights.

Content should be shaped to influence or trigger specific behavioural levers.



Test these messages for efficacy.

Content should be tested for efficacy, ie effect on the behaviour or proxy measures of the behaviour wherever possible prior to wider dissemination.

It should also be tested for safety to ensure that messages do not produce any unintended behavioral outcomes

Key SBCC principles of effective vaccine communication

1

Don't assume vaccine hesitancy.

2

Anticipate cognitive shortcuts.

3

Tell stories.

4

Build trust and use credible communicators.

5

Connect with people's values.

6

Remind people why we vaccinate.

7

Reinforce social norms.

8

Remember that busting myths can backfire.

9

Communicate vaccination as an act, not an aspiration.

10

Recognize vocal vaccine deniers.

Frame vaccination as an aspiration, not an act.



Avoid needles. Using images of needles and vaccination can make people more reactive—and less receptive—to new information.



Instead, emphasize the benefits of vaccination.

.....

Good practice:

Use “gain framing” to demonstrate how vaccination can help individuals and families lead healthier and happier lives.

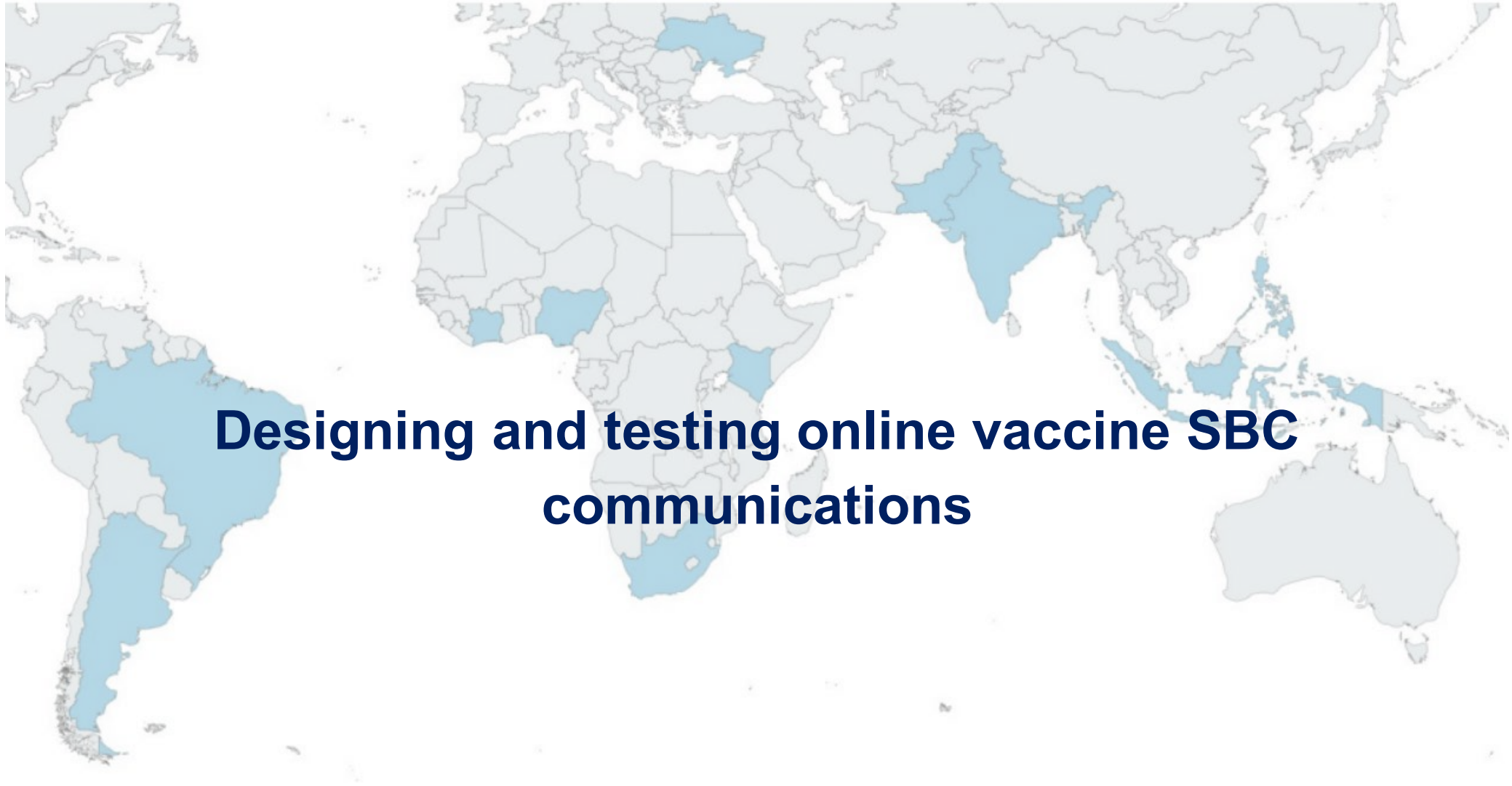
“

Choose
vaccination for a
healthier tomorrow!

”

Thanks to immunization efforts worldwide, children are able to walk, play, dance and learn. Vaccinated children do better at school, with economic benefits that ripple across their communities. They act as a protective shield, keeping families and communities safe.



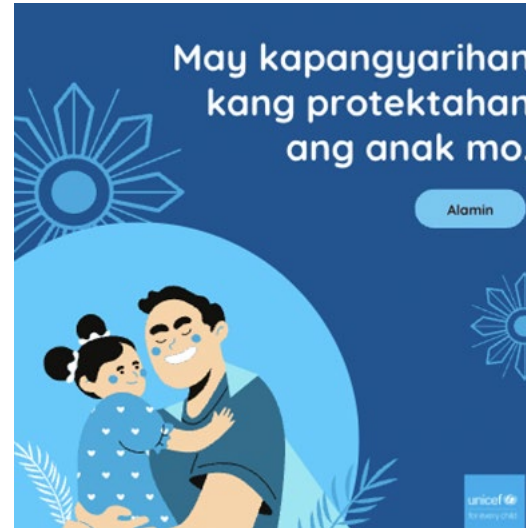


Designing and testing online vaccine SBC communications

9.45M people
reached per campaign

340k
clicks to UNICEF
Philippines Routine
Immunization page

Self-efficacy



Self-efficacy campaign positively shifted attitudes toward **importance** of vaccination, (vaccination) **recommendations** to friends/family, and parents self-reported **ability** to vaccinate their child(ren)

Values based approach



Liberty based campaign positively shifted attitudes towards **importance** of vaccination, (vaccination) **recommendations** to friends or family and parent's autonomy in decision-making

social listening:
the tracking, analysis and
synthesis of conversations on a
specific topic

- Can help detect important signals, shifts in conversations and common concerns
- Draws on multiple information sources to reach conversations **online, offline, on-ground**
- Should result in actionable insights

Strengthening Social Listening and Misinformation Management Mechanisms in Countries

A national social listening and misinformation management strategy can help RCCE and SBC teams:

- › Assess, understand and act on social and other data to improve the vaccine information ecosystem
- › Produce and share credible, accurate vaccine content that is also compelling – and respond to specific community concerns and questions.
- › Reduce the likelihood of encountering or spreading misinformation

Strategic Framework For Misinformation Management

1

PREPARE

Build team

Conduct information ecosystem analysis

2

LISTEN

Build social listening system

Detect misinformation

Maintain rumor log

3

UNDERSTAND

Assess Misinformation

Review analytics & intelligence

Identify actionable insights

Determine rapid response

4

ENGAGE

Launch strategic engagement

Create content campaigns

Develop inoculation content

Monitor & evaluate

Capture lessons learned

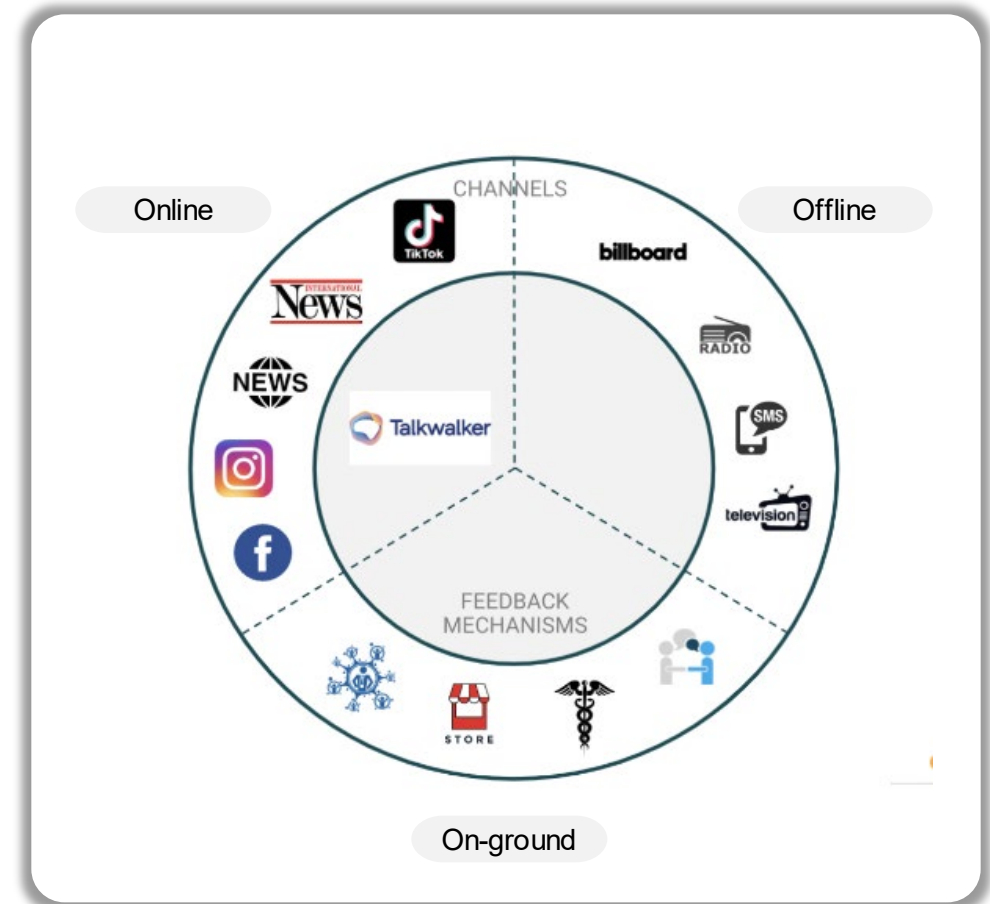
Mapping The Ecosystem

KEY QUESTIONS:

Where are the conversations taking place? (Online? Offline? In communities?) Which platforms are used?

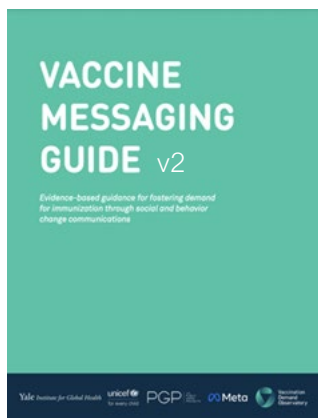
How can we listen to and understand those conversations? What the feedback mechanisms in place or needed?

How can we positively influence those conversations?



Global capacity strengthening program for misinformation response

Grounded in core UNICEF Resources, training features including:



Modular content offerings

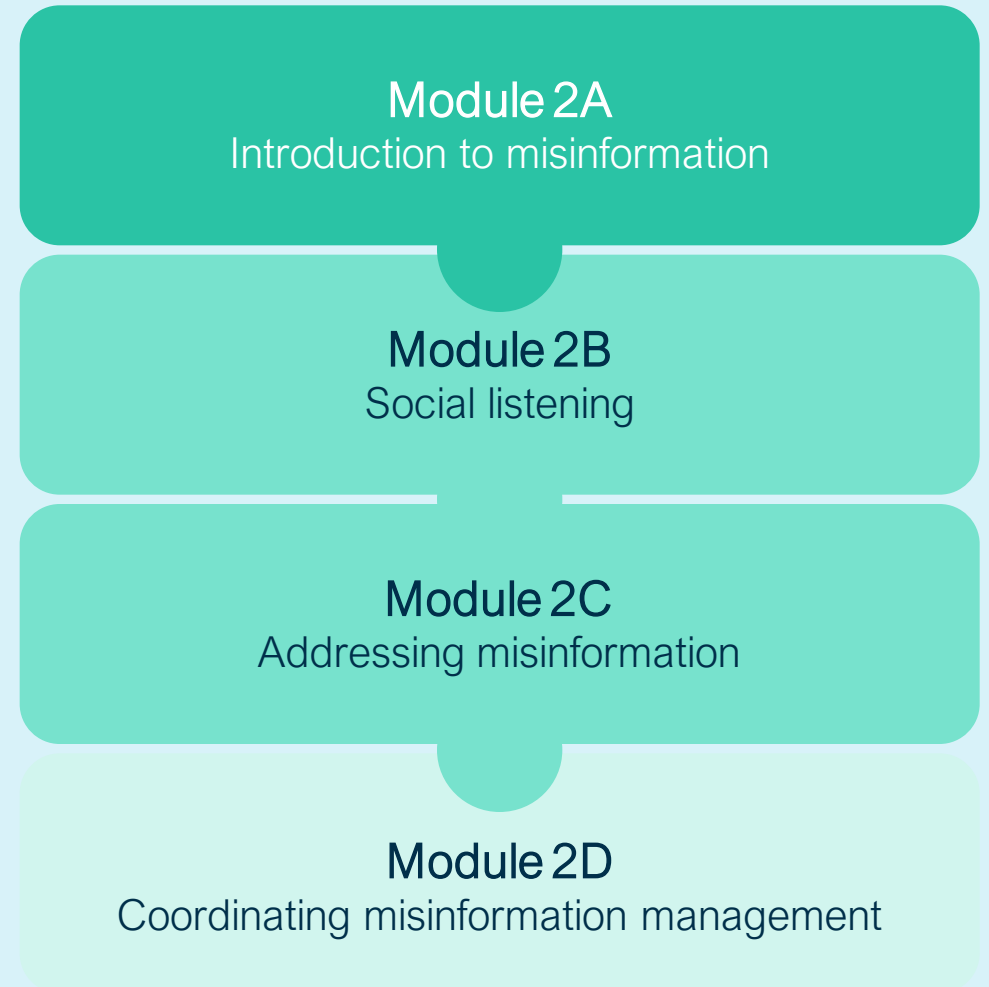
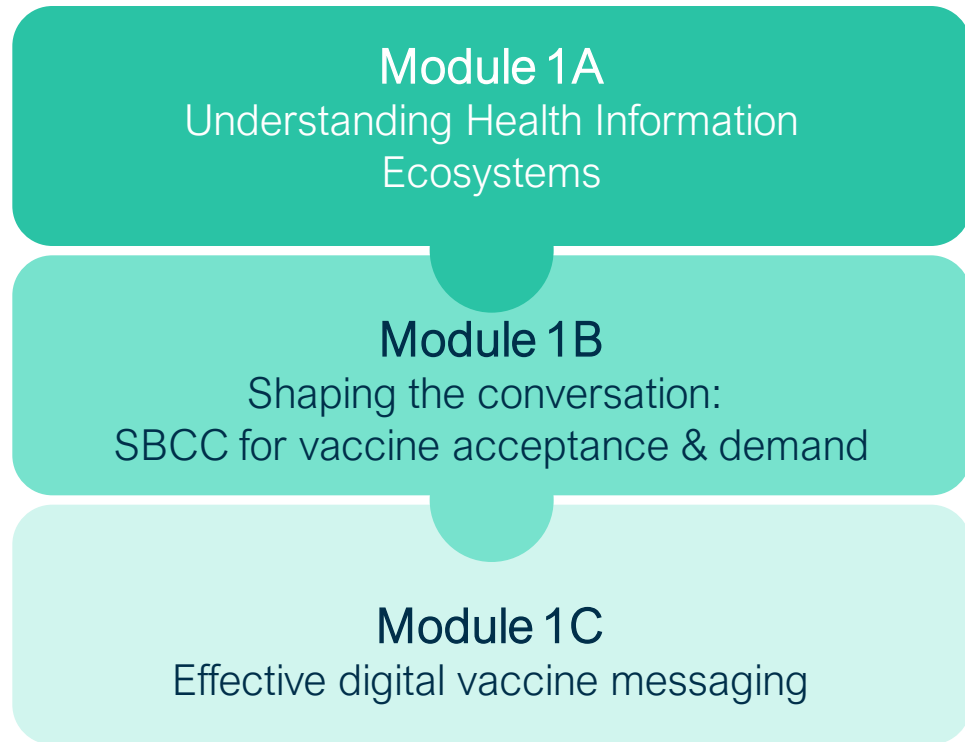
In-person or remote delivery

Practical and participatory sessions

Auxiliary resources

Evaluation module

Multi-lingual offerings (English and French)



Summary

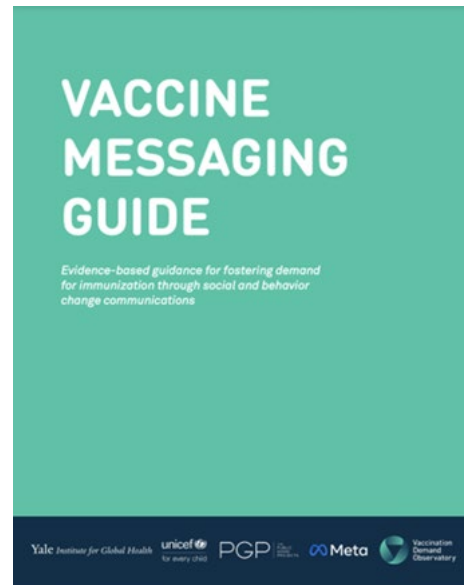
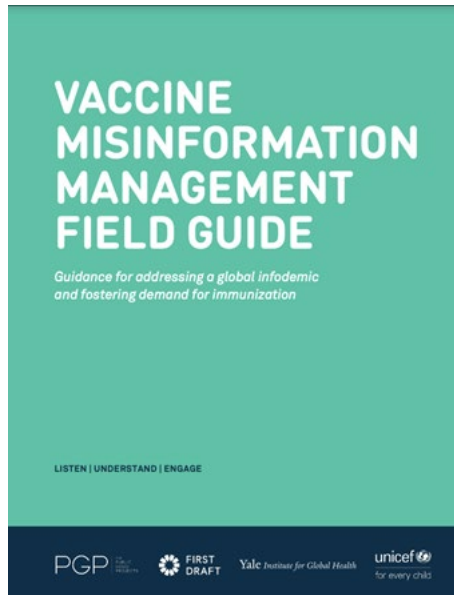
Understanding the **information gaps, questions and concerns and misinformation** that exist within vaccine conversations helps us address them in strategic and effective ways.

We should by producing and sharing credible, accurate **vaccine content** that is also compelling – and responds to specific community concerns and questions.

Vaccine decision-making is influenced by a wide range of factors that can differ across time and context. General PSA-style messaging typically does not reflect and respond to this complexity.

We must **understand** what drives vaccine decision-making in the communities we seek to engage to be able to respond through social behaviour change approaches

Resources



<https://vaccinemisinformation.guide/>

<https://www.unicef.org/documents/vaccine-messaging-guide>

<https://www.coursera.org/learn/digital-media-health-outcomes-english>

<https://www.unicef.org/documents/how-build-infographic-insights-report-six-steps>

A photograph of two young children, a girl on the left and a boy on the right, sitting together and playing with colorful toys. The girl is wearing a light blue top and a patterned vest, looking down at the toys. The boy is wearing a green sleeveless shirt and has a bright smile, looking towards the camera. The background is a textured, light-colored wall.


Thank you!

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October 2023

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