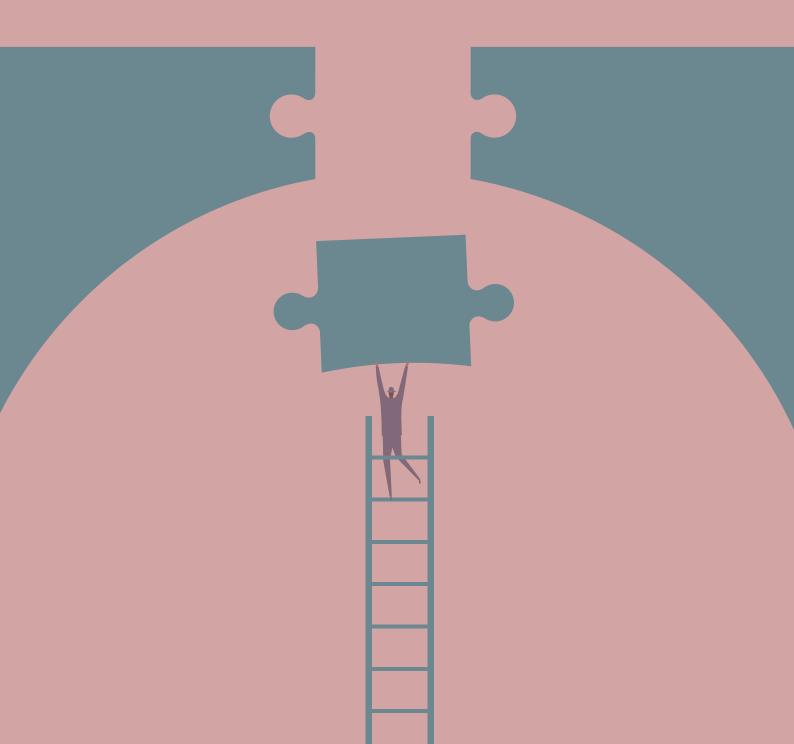


How to Build Trust in Vaccines

Understanding the drivers of vaccine confidence

INSIGHT REPORT

MAY 2021



Contents

- 3 Foreword
- 4 Executive summary
- 5 | 1 Insights
- 6 2 Discussion
- 8 Conclusion
- 9 Contributors

© 2021 World Economic Forum. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, or by any information storage and retrieval system.

Foreword

Debates on vaccines have been a feature of public health discourse since the first vaccines were invented. In the digital "information age", the challenge has been amplified, drawing in voices from around the world. Where pamphlets distributed in town squares used to make the case for or against vaccines, social media platforms are the new forum for debates.

The challenge of overcoming low vaccine confidence has exploded into the public awareness in the face of the COVID-19 pandemic. Low vaccine confidence has become a real challenge for governments as they race to ensure that everyone is protected against the virus.

The World Economic Forum and the Vaccine Confidence Project at the London School of Hygiene & Tropical Medicine have partnered with NetBase Quid, an analytics platform for discovering and monitoring consumer insights, to investigate public sentiment on vaccines. We have identified five key insights to guide engagement and communication – from business owners talking to employees, to families talking among themselves – and to help in considering the language and approaches to use when talking about vaccines or interacting with people who are not convinced that vaccines are safe or important, with the ultimate objective of helping more people get vaccinated against COVID-19 and other vaccine preventable diseases.

Executive summary

This paper outlines five insights drawn from the current public discourse on vaccines:

- People talk about "protection" as the most compelling reason to vaccinate
- High-profile messages calling vaccination a "moral obligation" provoke strong negative responses
- Messages that are simple, focused on gratitude and coming from health professionals, social influencers and "people like me" elicit more positive responses than messages from celebrities/politicians
- Lack of trust in the system and concerns about side-effects and safety of vaccines are the two most common drivers of vaccine reluctance and low confidence
- There is little differentiation in the public discourse between different types of vaccines, except in relation to safety and, for some, efficacy

Methodology: Establishing a data-driven framework for vaccine communication

The NetBase Quid analytics platform was utilized to read and analyse the public online conversation on vaccines to understand what drives and undermines confidence. The initial "vaccine" keyword search yielded 66 million conversations during the six-month period to April 2021. Sources included Twitter, Instagram, Facebook, forums and blogs.

The data was evaluated using NetBase Quid artificial intelligence and visualizations to test hypotheses that the the Vaccine Confidence Project at the London School of Hygiene & Tropical Medicine brought forth, based on its decades of research into factors that drive and undermine confidence. For example, a subset of the conversation that included phrases such as, "I've had the vaccine", was then used to explore the most common words, concepts and reactions associated when people post that they have been vaccinated. The nuances of the emotions people demonstrate, as well as the longevity of the ideas, were also studied.

1

Insights

How people talk about vaccines – the language they use and the responses generated by that language – can offer important insights into the most effective ways of communicating about vaccines. Language that is both positive and widely used could tell us how to shape public health messages to be more effective. Similarly, language that elicits a strong negative response should be avoided because those responses can include messaging that justifies low vaccine confidence and thus can have a negative impact on others. The insights, as derived from the research, are as follows:

Insight 1: Protection first

By far the most frequently used term in positive social media conversations about vaccination was "protection". It appeared some five times more often than "prevention" and at least 10 times more frequently than the next most frequently used term, "stop infection".

- Insight 2: Moral backlash

"Even Her Majesty thinks anti-vaxxers are selfish." – Twitter user, 25 February 2021

"Let others choose the way they look after their own health." – Twitter user, 25 February 2021

High-profile events, such as Queen Elizabeth II being vaccinated, and subsequent media reports prompted some positive sentiment but also a high level of negative comments against the implied directive of "moral responsibility" that people need to get vaccinated.

Many posts highlighted reasons for rejecting the perceived moral injunction. An example post invoked safety concerns as trumping moral responsibility: "My health is not worth the risk [of the vaccine]."

Insight 3: Trusted messengers

Images and simple messages drove high levels of engagement, especially those with images generating a sense of "authenticity". Health professionals, social media influencers and "people like me" received particularly positive responses to vaccination messages, far more so than many better-known celebrities or politicians.

Insight 4: Safety and systems

The image above shows the connections between different concepts referenced in the context of negative sentiment on vaccines.

Although many are interlinked, broadly speaking two issues are highly interconnected and may form specific sub-groups – distrust in the system, and fears over possible vaccine side-effects.

Insight 5: Is It safe? Does It work? "[The] vaccine is not a guarantee that you will not get COVID." – Twitter user, 31 March 2021

The key insight here is that the dominant discourse on COVID-19 vaccination rarely distinguishes between the different vaccinations, except in relation to safety and, to a lesser extent, efficacy.



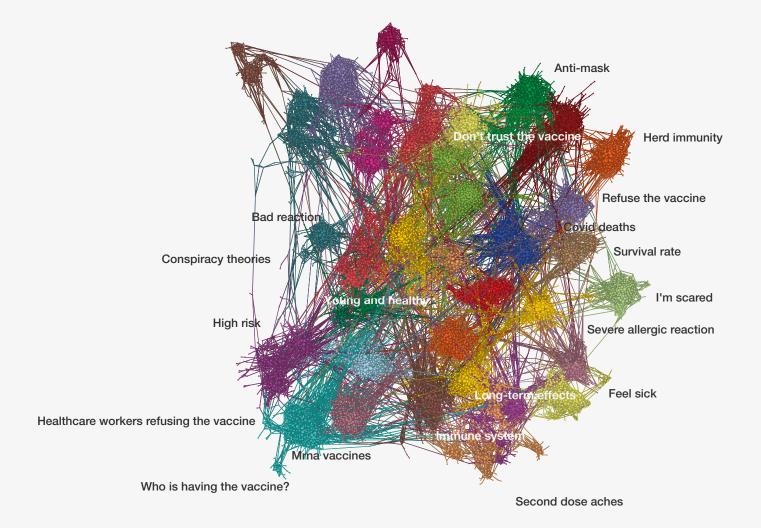
Discussion

The insights offer a snapshot of the recent trends in public discourse on vaccines. However, each of these insights also speaks to the many complex factors that interact to influence the level of confidence that each of us has in vaccines. Some of the most prominent factors in relation to these insights are:

- Trust Trust in the individuals, institutions and overall system that together discover, develop and deliver vaccines is fundamental to vaccine confidence. Vaccines are the output of a complex system involving scientific research institutions, pharmaceutical companies, governments and the public health system. Lack of trust in any part of this system can undermine vaccine confidence. Trust is a key element of insights 3 and 4.
- Group identity The groups with which an individual self-identifies can have a major impact on their level of vaccine confidence, depending on where the group sits politically, societally and what defines their values and beliefs. This group identity not only can influence their level of trust in the system but also encompass a range of other issues, including whether they identify with belief systems that do not align with modern medicine or are related to historic experiences that make them more hesitant or fully against vaccines and what they represent.
 - Aspects relating to identify come through most strongly in insights 2 and 3, particularly relating to the perceived value judgment by others and regarding the positive responses generated by messages coming from "people like me". The impact of influencers is also related to the "identity" aspect. Given that people choose whether to follow a certain influencer or not, we can assume that they identify with that individual to a certain extent and are more likely, therefore, to respond positively to communication from them on vaccines.

- Public figures Whether it's social media influencers, clinicians, scientists, politicians, or a host of other public figures we see in the press and media daily, these figures can influence how we feel about vaccines. Insights 2 and 3 relate to the role of public figures in the discourse on vaccines.
- Labels How we talk about vaccine confidence can shape it. In this paper, we avoid using terms such as "anti-vax" as these labels can polarize discussions on vaccination. Instead, we recognize a continuum of vaccine confidence, recognizing that individuals can move along the continuum of confidence, with different levels of confidence on different vaccines. Sentiments can and do vary greatly even among routine immunizations, including those that have nearly eradicated infectious diseases.
 - Insight 2 relates most clearly to labels, though there is some overlap with empathy (see below). Labelling with terms such as "vaccine hesitant" or "anti-vax" is also part of the process through which people make judgments or proscribe a moral obligation to an action. So, if being vaccinated is presented as a moral obligation, those who do not get vaccinated may feel they are being labelled as selfish, which can elicit a strong negative response. Conversely, as seen in insight 3, general messages or personal perspectives such as "gratitude" elicit stronger positive responses. This could be because they avoid actively commenting on people who have low vaccine confidence.
- **Empathy** When people choose not to get their children vaccinated, it is not because they have a strong desire for their child to contract a potentially lethal disease. It is because they think it is the best choice for their child. The motives that drive some people to vaccinate can drive

- others not to vaccinate. Trying to understand the motives, concerns and fears that drive vaccine sentiments, and empathise with them, is far more effective than making judgments or moralising when engaging in conversations about vaccines. This is particularly relevant when engaging with people who are undecided about vaccines or who have genuine concerns.
- As above, the need for empathy comes through most strongly in insight 2, where the suggestion that people "should" get vaccinated is met by negative responses where people articulate why they do not want to, suggesting that they don't feel like their concerns are being properly appreciated.
- Risk/benefit Different people have different ways of calculating risk and reward, often labelled as risk versus benefit. The risk of a serious side-effect after vaccination, even if very rare, may appear more threatening to some people than the disease it aims to prevent.
- This factor comes through most strongly in insights 1, 4 and 5. In the first instance, language for "protection" was more widely used than that for "prevention". Protection may resonate more because it conceptually speaks more to the idea of avoiding personal risk or harm than prevention. Conversely, insight 4 suggests there is a group of people who perceive the risk/ reward balance differently and have low vaccine confidence because they perceive the risks particularly strongly. Lastly, insight 5 speaks directly to concerns that specific vaccines may be unsafe, or that a vaccine may not work and, therefore, is not beneficial or worth the perceived risk.



Note: Diagram showing connections between different drivers of low vaccine confidence **Source**: NetBase Quid analysis on vaccine sentiment

Conclusion

Confidence - an ongoing challenge

Questions and concerns about vaccines have been a challenge as long as there have been vaccines and will continue to be in the future.

The drivers of questions and concerns about vaccination will not go away but they vary in different settings and among different groups. History has demonstrated that the same theme can recur in different forms over and over again. COVID-19 has put the vaccine confidence challenge in front of mind for many and it will not go away when the pandemic eases.

As such, everyone with an interest in public health has a role to play. The way we communicate day-to-day with our family, friends and peers can build or diminish vaccine confidence. It is not a singular campaign that is needed but a long-term approach to building and sustaining trust. We hope these insights can be a useful starting point and serve as a guide for framing conversations on vaccines and building confidence within one's communities.

Contributors

World Economic Forum

Kelly McCain

Lead, Shaping the Future of Health and Healthcare, World Economic Forum

Matthew Oliver

Consultant, World Economic Forum

Lead authors

Bob Goodson

President and Co-Founder of NetBase Quid

Heidi Larson

MA, PhD, Founding Director of the Vaccine Confidence Project and Professor of Anthropology and Risk at the London School of Hygiene & Tropical Medicine

We thank Jackie Balchin, Senior Strategist, NetBase Quid; Julie Kim, Senior Solutions Consultant, NetBase Quid; and Simon Piatek, Digital Analytics Lead, the Vaccine Confidence Project at the London School of Hygiene & Tropical Medicine, for contributing to the research and insights in this report.



COMMITTED TO IMPROVING THE STATE OF THE WORLD

The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.

The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.

World Economic Forum

91–93 route de la Capite CH-1223 Cologny/Geneva Switzerland

Tel.: +41 (0) 22 869 1212 Fax: +41 (0) 22 786 2744 contact@weforum.org www.weforum.org