

## LETTER TO THE EDITOR

# Improving communication about COVID-19 and emerging infectious diseases

John Ioannidis writes about the harm caused by misinformation about COVID-19.<sup>1</sup> We draw from communication research to offer best practices for reducing misinformation, disseminating accurate health information and promoting prevention and control recommendations. We recommend three strategies that medical, public health and scientific professionals working with government officials, clinicians, media commentators and in other contexts around the world can use to improve communication about outbreaks.

First, we can acknowledge uncertainty. Public trust is damaged when health authorities are perceived to have inappropriately downplayed the true risk posed by a dangerous pathogen or, alternatively, to have caused undue panic by overstating a potential threat. Honesty about what is known and what is not known at each stage of an epidemic is a critical component of transparency.<sup>2</sup> For example, model-based projections about how epidemics might expand should be reported as likely ranges of mild-to-severe events rather than just presenting best- or worst-case scenarios.

Second, we can contextualize statistics. Most people find it difficult to estimate personal risk based on population-level data, especially for relatively unlikely occurrences.<sup>3</sup> One way to mitigate excessive anxiety related to rising case counts is to pair discussion of personal, community or national risk with recommendations about concrete, evidence-based actions that reduce risk.<sup>4</sup> These suggestions should be specific to the disease of concern, and the recommendations should be updated as more scientific evidence becomes available.



Third, we can resist misinformation. Uncertainty breeds rumours and confusion, and social media platforms offer a fertile space for misinformation to be generated and disseminated. Accurate information provided by trusted clinicians and scientists can help mitigate the spread of misinformation that is damaging to public health. Health communication specialists may be able to directly counter prominent false narratives while promoting reliable sources of health information.<sup>5</sup> Health professionals who are not trained on methods for combatting misinformation can, at minimum, refrain from propagating it.

Effective communication about public health is a challenge even without the heightened fear levels that occur when

new diseases like COVID-19 emerge. Even when messaging about a health security threat is constrained by politics, media practices and other limiters, the three guidelines above can still be applied in communications with the public, the media and other audiences. Acknowledging uncertainty, contextualizing statistics and resisting misinformation will improve communication about emerging infectious diseases from the initial crisis through the resolution of the event.

## CONFLICTS OF INTEREST

None to declare.

Kathryn H. Jacobsen<sup>1</sup>   
Emily K. Vraga<sup>2</sup> 

<sup>1</sup>Department of Global and Community Health,  
George Mason University, Fairfax, VA, USA

<sup>2</sup>Hubbard School of Journalism and Mass  
Communication, University of Minnesota,  
Minneapolis, MN, USA

## Correspondence

Kathryn H. Jacobsen, Department of Global and  
Community Health, George Mason University, 4400  
University Drive 5B7, Fairfax, VA 22030, USA.  
Email: kjacobse@gmu.edu

## ORCID

Kathryn H. Jacobsen  <https://orcid.org/0000-0002-4198-6246>

Emily K. Vraga  <https://orcid.org/0000-0002-3016-3869>

## REFERENCES

1. Ioannidis JPA, Coronavirus disease 2019: the harms of exaggerated information and non-evidence-based measures. *Eur J Clin Invest.* 2020;50: <https://doi.org/10.1111/eci.13222>
2. O'Malley P, Rainford J, Thompson A. Transparency during public health emergencies: from rhetoric to reality. *Bull World Health Organ.* 2009;87:614-618.
3. Schwartz LM, Woloshin S, Welch HG. Risk communication in clinical practice: putting cancer in context. *J Natl Cancer Inst Monogr.* 1999;25:124-133.

4. Witte K. Generating effective risk messages: how scary should your risk communication be? *Ann Int Commun Assoc.* 1995;18:229-254.
5. Vraga EK, Bode L. Using expert sources to correct health misinformation in social media. *Sci Commun.* 2017;39:621-645.