


Concrete Recommendations for Cutting Through Misinformation During the COVID-19 Pandemic

 See also Chou and Gaysynsky, p. S270, and Southwell et al., p. S288.

The COVID-19 pandemic presents multifaceted challenges for the US health care system. One such challenge is in delivering vital health information to the public—a task made harder by the scourge of health misinformation across the information ecosystem (Southwell et al., p. S288 in this issue of *AJPH*, and Southwell et al.¹). I offer concrete recommendations for public health information officers and communication professionals drafting communication campaigns for health agencies and health organizations to maximize the chance that timely health advisories reach the public.

At Harvard Kennedy's Shorenstein Center, the Technology and Social Change Research Project studies how misinformation spreads and what its impact is on politics and society (bit.ly/2YcTX09bit.l). Unlike political disinformation, or fake news, health misinformation can quickly lead to changes in behaviors, which is why health communicators can't wait for tech companies to solve the problem.²

For example, research on antivaccination movements shows how celebrities, activists, and discredited physicians gain influence over vaccination policies, while also promoting

quackery, misinformation, and conspiracies on social media.³ Although it is difficult to know who has been affected by health misinformation, best strategies to counter it focus on addressing “silent audiences” with direct, careful, and succinct messaging.⁴

Search engines and social media platforms are struggling to control the groundswell of new attention to COVID-19 and are having difficulty matching the right information to the right person at the right time. For example, searching Google, Facebook, Twitter, or YouTube for the phrase “Where can I get tested for coronavirus?” will return different information—or worse, fake news, a predatory scam, or malware (<https://politi.co/3g9uzOE>).

The pandemic lays bare how the algorithmic design of search engines and social media, which prioritize fresh and relevant content, contributes to confusion by mixing different kinds of information into a single feed: the mundane, the newsworthy, and critical medical recommendations (<https://bit.ly/3iQoetq>). Additionally, because many platforms are designed with advertising as their backbone, authoritative content from health agencies, health professionals, and local governments is often

subsumed by advertising looking to grab clicks.⁵

The situation is dire. People need timely, relevant, and local information on COVID-19. Likewise hospitals, governments, health agencies, and universities are overwhelmed with inquiries and need to use mass communication to reach everyone. Any communication strategy must use redundancy by getting the same information out across as many different channels as possible.

Here are five recommendations based on our research about medical misinformation at the Shorenstein Center:

1. Domain registrars have reported upward of 120 000 domains with keywords related to coronavirus or COVID-19. Although most of the new domains have no content, scammers are using custom domains to target people seeking information about treatment, the worried well, and those suffering

financial hardships because of COVID-19 (<https://nbcnews.to/3iT5QQu>). Public health and health care organizations with already established and functioning Web sites should not register new domains because it is difficult to gain traction within search engines and social media. Instead, these organizations should make a page dedicated to the particular health emergency, in this case COVID-19, on their already existing Web site and update it regularly, even if there is nothing newsworthy to report. Updates provide fresh signals to algorithms, which will rank it accordingly.

2. Debunking every rumor, every conspiracy theory, and all political punditry exhausts critical resources. Furthermore, there has been a deluge of requests for interviews with medical personnel and public health advocates. Health communicators should establish a monitoring protocol to decide which misinformation is gaining traction and approaching a tipping point, such as when misinformation moves across platforms or someone newsworthy, such as a politician or celebrity, distributes it. We recommend routinely checking the

ABOUT THE AUTHOR

Joan Donovan is with the Harvard University John F. Kennedy School of Government, Cambridge, MA.

Correspondence should be sent to Joan Donovan, PhD, Research Director, Harvard University John F. Kennedy School of Government, 50 Hawthorne St, Somerville, MA 02144 (e-mail: Joan_donovan@jhs.harvard.edu). Reprints can be ordered at <http://www.ajph.org> by clicking the “Reprints” link.

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Federal Emergency Management Agency's rumor database (<https://bit.ly/3kSOKUO>) and Google's fact-checking database of recently debunked news stories (<https://bit.ly/2Ebnwbg>). Scan comments posted to local social media groups and public messaging apps, such as Nextdoor. Keep a log of comments the organization receives via social media accounts, telephone, or e-mail. Importantly, no one should respond to misinformation unless there is good reason to do so and they have a plan for communicating it publicly (<https://bit.ly/3j4PKnh>). It is recommended not to respond to individuals but rather to debunk major misinformation themes.

3. Keeping up with the demand for new information during this pandemic will require a shift to mass communication strategies. In terms of risk communication, working with journalists is key to fighting misinformation. Building two-way communication bridges between health communicators and local journalists will ensure visibility and trust across professional sectors when communication emergencies happen. This is different from hosting press conferences. It's about creating real relationships, where public health is the shared goal. Helping journalists debunk misinformation and providing key recommendations will raise the credibility and visibility of public health recommendations to broad audiences.
4. If using social media to communicate, which all public health organizations should do, contact the platforms and request free public

service advertising. In a crisis like this, online advertising systems can be repurposed to reach local audiences (<https://bit.ly/3gcHpfc>). Local television news remains a reliable way to inform many people quickly and locally.

5. Local governments and health agencies should set up text messaging systems and SMS (short message service) push notifications, where possible, to reach people outside social media. Although emergency management strongly advises that governments set up these systems before a disaster, the pandemic is an opportunity to enroll many people. Alternatively, emergency alert systems do not require a sign-up and could be adapted to reach people in a certain geographic area. For example, New York City has used emergency alerts to request health care workers.

Right now, search and social media companies are not designed to deliver authoritative, timely, relevant, and local information. Tech companies are at a crossroads, where the alliances and coalitions built now to tackle the COVID-19 pandemic will shape the future of risk communication on the Internet. It is crucial, therefore, that health communication professionals understand the limitations of social media and actively work to mitigate misinformation to lessen the harms caused by unchecked scams, hoaxes, and conspiracies; the public must be able to access timely, local, and relevant information when they need it most. **AJPH**

Joan Donovan, PhD

CONFLICTS OF INTEREST

The author has no conflicts of interest to disclose.

REFERENCES

1. Southwell BG, Niederdeppe J, Cappella JN, et al. Misinformation as a misunderstood challenge to public health. *Am J Prev Med*. 2019;57(2):282–285. <https://doi.org/10.1016/j.amepre.2019.03.009>
2. Donovan J. Social-media companies must flatten the curve of misinformation. *Nature*. 2020; Epub ahead of print. [10.1038/d41586-020-01107-z](https://doi.org/10.1038/d41586-020-01107-z)
3. Sharfstein JM. Vaccines and the Trump administration. *JAMA*. 2017;317(13):1305–1306. <https://doi.org/10.1001/jama.2017.2311>
4. Steffens MS, Dunn AG, Wiley KE, Leask J. How organisations promoting vaccination respond to misinformation on social media: a qualitative investigation. *BMC Public Health*. 2019;19(1):1348. <https://doi.org/10.1186/s12889-019-7659-3>
5. Noble SU. *Algorithms of Oppression: How Search Engines Reinforce Racism*. New York, NY: New York University Press; 2018. <https://doi.org/10.2307/j.ctt1pwt9w5>