COVID-19: The First Posttruth Pandemic

See also Morabia, p. 923, Tarantola et al., p. 925, and the AJPH COVID-19 section, pp. 939–977.

A successful public health response to outbreaks such as COVID-19 depends on broad dissemination and widespread acceptance of accurate information.¹ Yet, in recent weeks, inaccurate information and deceptive information have been plentiful. Even national leaders have offered misleading and sometimes false accounts of the risks facing the United States and the speed of vaccine development.²

The barrage of false information has helped to erode trust in public health leaders and hinder efforts to contain the pandemic. Unless the public trusts that public health measures are grounded in the best available science, even if that science is incomplete and changing, individuals cannot be expected to follow public health recommendations, such as to shelter in place.

Political leaders have not been alone in generating this climate of doubt. Many celebrities, pundits, and even some local health officials have downplayed the dangers for months. Rumors about the virus's origins, impending national lockdowns, and imminent cures have also circulated widely. This cacophony helps explain why spring breakers partied on Florida beaches while cities elsewhere shut down.

POSTTRUTH

Of course, COVID-19 is not the first epidemic to generate rumors and lies. Throughout history, demagogues and snake oil salesmen have exploited plagues to spread falsehoods, maintain power, or make money. What seems different today is that we confront not simply deceptions and erroneous statements but rather a deep skepticism about the very idea that truth exists. In our posttruth world, the line between fact and opinion fades. Being "caught" in a lie no longer guarantees negative consequences, and the phrase "believing is seeing" has transformed from a psychological insight into an accepted way of life. Although the roots of this epistemic crisis are clearly visible in the antivax movement and climate change denialism, COVID-19 may be our first posttruth pandemic.

Posttruth is not a novel concept. All who have read George Orwell's *1984* can readily imagine a world where a powerful Ministry of Truth commands allegiance to contradictory statements such as "Freedom is slavery." The belief that truth exists can also wither when, as 20th-century philosopher Hannah Arendt explained, those in power repeat lies so frequently as to overwhelm the public's capacity to know what is true or false.³

These prominent examples suggest that posttruth is a topdown phenomenon coming from politicians eager to maintain power by deceiving the public. However, today's posttruth, as the reaction to COVID-19 vividly illustrates, also comes from the bottom up. It is not just that desperate people grasp at rumors, such as the claim that blowing a hair dryer up one's nose can relieve COVID-19 symptoms; it is also that the current environment fosters the sense that individuals need give no more credence to information grounded in the best available scientific evidence than to whatever seems useful or feels right. Even worse is the perception that there is no objective "truth" and so no need to search for it or to test claims against it. Rather, truth feels fleeting; claims are more or less persuasive based not on the accumulation of rigorous science or the credibility and expertise of the speaker but on the celebrity, political party, or intuition of speaker and listener.⁴

THE ROOTS OF THE CRISIS

Researchers have identified many potential sources of the posttruth phenomenon. Viral spread of contradictory information over social media builds a climate of distrust. Rapid cultural change and widening economic inequality have fueled increases in political polarization that cement loyalty to party over a shared search for truth.⁴ The stunning failure of public officials and experts to predict and prevent the September 11 attacks and the 2008 fiscal crisis, and well-publicized miscues such as the rollout of healthcare.gov, have eroded faith in national leaders. Looking beyond these forces, we suggest that several additional factors warrant consideration.

Consider first the decadeslong movement trumpeting patient choice, a trend supported by the federal courts' expansive interpretation of the First Amendment rights of advertisers that helped pave the way for directto-consumer drug advertisements.⁵ Even the salutary legal and ethical doctrines of informed consent can have unintended consequences. Providers must give patients the information they need to make the decisions relevant to their health. This

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This editorial was accepted April 13, 2020.

doi: 10.2105/AJPH.2020.305721

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respects dignity and autonomy and can support patient health. Nevertheless, as patients have come to believe that their views "count" as much as those of their health care provider, their faith in expertise may flounder. Patients accustomed to making their own health care decisions may begin to believe that there are no objectively "right" answers, only their own subjective preferences, informed by the Internet, social media, anecdotes, and gut instincts.

The belief that subjective feeling should override expert advice is also evident among parents who resist or delay vaccinating their children. It may also be apparent in the public's resistance to public health advice relating to diet and exercise, which, to many Americans, may appear grounded more in "nannyism" than science. From that perspective, public health advice is viewed as rooted not in truth but in contested values and preferences.

No doubt reportage about fake science sponsored by the tobacco, fossil fuel, and other industries has further eroded the belief that science seeks to uncover "truth."⁶ How can we expect the public to accept that science strives for truth when people read about retractions, faked studies, and even an entire blood testing company built on a lie?

TRUST IN SCIENCE

The good news is that trust in science remains high, at least relative to other institutions.⁷ Moreover, if we search for silver linings, COVID-19 could burst the posttruth bubble. Viruses are all-too real, and this one may lead a skeptical public to re-embrace respect for scientific truth,

especially if public health warnings prove accurate or scientists develop an effective vaccine. Indeed, despite the antivax movement, a January 2020 Pew Survey found that 88% of American adults believe that the benefits of the measles, mumps, and rubella vaccine outweigh the risks. But it is also possible that COVID-19, and our leaders' inability to temper it, will further erode the public's trust that public health officials speak truth rather than push their own hidden agendas.

To avoid that outcome, public health officials must explain the basis for their conclusions and the limits of their knowledge. They must also speak out against efforts to distort public health information for partisan gain. This may compel calling out public officials who spread dangerous falsehoods.

Longer term, rebuilding a culture of trust must rise to the top of the public health agenda. That may require revisiting the role of patient autonomy and working to convince courts to accept modest limits on drug advertisements. Public health researchers must also work to ensure greater transparency and integrity in research and call out research that is distorted for funding or partisan purposes. In addition, public health educators must teach students how to communicate the limits of what is known and how to remain open to divergent perspectives without losing faith in truth. Above all, we must root out the deeper social causes of posttruth and its impact on public health and find interventions that can restore trust in the scientific enterprise. Even in this posttruth era, the search for truth, and the belief that it exists, remain critical to public health. If we can preserve them, COVID-19

may be our last posttruth pandemic. *A*JPH

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CONFLICTS OF INTEREST

The authors have nothing to disclose.

REFERENCES

1. Dupras C, William-Jones B. The expert and the lay public: reflections on influenza A (H1N1) and the risk society. *AmJ Public Health.* 2012;102(4):591–595.

2. Leonhardt D. A complete list of Trump's attempts to play down coronavirus. *New York Times*. March 15, 2020. Available at: https://www.nytimes. com/2020/03/15/opinion/trumpcoronavirus.html. Accessed March 26, 2020.

3. Arendt H. Lying in politics: reflections on the Pentagon Papers. *New York Rev Books*. Nobember 18, 1971. Available at: https://www.nybooks.com/articles/ 1971/11/18/lying-in-politics-reflectionson-the-pentagon-pape/?utm_medium= email&utm_campaign=NYR%20Longread %20Hannah%20Arendt&utm_content= NYR%20Longread%20Hannah%20Arendt+ CID_ea2b041440737a3895299f105f613b3d& utm_source=Newsletter&utm_tem=Keep% 20Reading. Accessed March 25, 2020.

4. McIntyre L. *Post-Truth*. Cambridge, MA: MIT Press; 2018.

5. Bohrer RA. Direct-to-consumer ads are misleading: concise statements of effectiveness should be required. *J Health Care Law Policy*. 2019;22:209–221.

6. Conway EM, Oreskes N. Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues From Tobacco Smoke to Climate Change. New York, NY: Bloomsbury Press; 2010.

7. Funk C, Hefferon M, Kennedy B, Johnson C. Trust and mistrust in Americans' views of scientific experts. Pew Research Organization. August 2019. Available at: https://www.pewresearch. org/science/2019/08/02/trust-andmistrust-in-americans-views-ofscientific-experts. Accessed March 25, 2020.