The era of untruth

"Without facts, you can't have truth. Without truth, you can't have trust. Without all three, we have no shared reality, and democracy as we know it—and all meaningful human endeavors—are dead."

—Maria Ressa

he spread of misinformation is undermining the potential of the Internet as a force for good and posing serious risks to individual and societal health. Misinformation not only creates challenges to accessing and applying accurate information to support personal health decisions but also threatens to exacerbate public health crises, inequality, societal division, racism, conflict, climate change, and democracy itself.

The World Economic Forum Annual Meeting 2024 rated misinformation and disinformation (deliberate misinformation) as the most serious short-term global threat. In the hands of those with nefarious commercial, political, or personal motives, and assisted by artificial intelligence technology, global information systems are predicted to be increasingly flooded with false narratives.1 In Canada, misinformation during the COVID-19 pandemic contributed to vaccine hesitancy, resulting in an estimated 3500 additional ICU admissions and 2800 additional deaths at a cost of \$30 million.² The 2023 Edelman Trust Barometer found that up to 50% of respondents followed social media advice that contradicted their doctors' advice.3

This phenomenon is driven by increasing social media use, which is correlated with the likelihood of believing health-related misinformation or conspiracy theories.⁴ Yet 55% of Canadians today rely on social media for their news. Unlike traditional media, social media content is developed

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and disseminated without journalistic integrity, oversight, or safeguards such as fact-checking. Technology platforms employ tactics like psychological manipulation, such as confining users within echo chambers, to boost profitability through increased clicks and shares.² Unfortunately, this comes at the expense of truth, given that inaccurate stories spread 6 times faster than true ones.²

Debunking established beliefs is possible using a respectful, empathetic approach.

Disseminators of disinformation use tactics to increase the appearance of legitimacy, citing false or discredited reports and using language or graphics designed to mimic credible sources. Scientific truths are distorted using simple, repetitive, and unambiguous messages to trigger emotional reactions. Anxiety, fear, and confusion drive people to accept false information-especially those in disenfranchised communities who have lost trust in mainstream media or science. The seemingly simple (yet false) solutions that are offered provide individuals with a sense of control and offer a target for their anger, however misdirected, particularly in times of uncertainty or insecurity.

To combat the problem at a systemic level, governments can increase support to trustworthy news media, develop media literacy education for all age groups, and broadly disseminate accurate information in effective and engaging ways. Additionally, governments can mitigate the harms of social media by regulating technology platforms to ensure greater transparency, accountability, and safety.

Individual practitioners should welcome discussions about patients' Internet use and help inoculate against susceptibility to misinformation. One approach is to recommend credible sites such as the Clarity Foundation (https://clarityfoundation .com), the United Nations' Verified campaign (https://shareverified.com), and online games like Go Viral and Bad News. Debunking established beliefs is possible using a respectful, empathetic approach (for example, saying "I get it; it's really confusing"), listening to patients' perspectives, gently exploring areas of shared values (health of family members), and being prepared to provide credible information to allow patients to do their own research.4

Although health professionals and scientists continue to be the most trusted sources of information, we must work to maintain that trust. Misinformation, patient fears, and conspiracy theories often grow from seeds of truth about corporate influence. Therefore, we need to continue to distance ourselves from sources of potential industry bias within our own profession and call out government when their decisions put corporate interests before public health.

Misinformation limits our ability as a society to develop a shared understanding of the problems we are facing and identify effective solutions to address them. Today, the truth matters more than ever.

—Ilona Hale, MD, FCFPC
Council on Health Promotion Member

—Katharine McKeen, MD, MBA, FCFP
Council on Health Promotion Member

—David D. Sweet, MD, FRCPC
Executive Medical Director, Health Quality BC
Co-Founder, Clarity Foundation

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References

- 1. World Economic Forum. Global risks report 2024. Accessed 17 January 2024. www.weforum .org/publications/global-risks-report-2024.
- 2. Council of Canadian Academies. Fault lines: Expert panel on the socioeconomic impacts of science and health misinformation. 2023. Accessed 18 January 2024. https://cca-reports .ca/wp-content/uploads/2023/01/Report-Fault -Lines-digital.pdf.
- 3. Edelman. 2023 Edelman trust barometer: Global report. 2023. Accessed 22 January 2024. www.edelman.com/sites/g/files/aatuss191/ files/2023-03/2023%20Edelman%20Trust% 20Barometer%20Global%20Report%20 FINAL.pdf.
- 4. American Psychological Association. Using psychology to understand and fight health misinformation: An APA consensus statement. 2023. Accessed 16 January 2024. www.apa.org/ pubs/reports/health-misinformation.

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—Jiayun Angela Yao, PhD **Senior Scientist, BCCDC Environmental Health Services**

-Michael J. Lee, PhD **Environmental Epidemiologist, BCCDC Environmental Health Services**

References

- 1. Reisen F, Duran SM, Flannigan M, et al. Wildfire smoke and public health risk. Int J Wildland Fire 2015:24:1029-1044.
- Feng S, Gao D, Liao F, et al. The health effects of ambient PM₂₅ and potential mechanisms. Ecotoxicol Environ Saf 2016;128:67-74.
- Smith KR, Peel JL. Mind the gap. Environ Health Perspect 2010;118:1643-1645.
- 4. Thangavel P, Park D, Lee YC. Recent insights into particulate matter (PM, s)-mediated toxicity in humans: An overview, Int J Environ Res Public Health 2022:19:7511.
- 5. Burke M, Childs ML, de la Cuesta B, et al. The contribution of wildfire to PM₂₅ trends in the USA. Nature 2023;622:761-766.
- 6. Barn PK, Elliott CT, Allen RW, et al. Portable air cleaners should be at the forefront of the public health response to landscape fire smoke. Environ Health 2016;15:116.



