

Repairing our broken relationship with the vaccine hesitant

Empathy, compassion, and humility are needed

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Despite early concerns that vaccination against COVID-19 might never be possible, Health Canada approved not 1 but 4 highly effective vaccines within 15 months of the first cases of the virus having been detected in Wuhan, China. Despite the subsequent emergence of alpha, delta, and other variants of concern, the effectiveness of these vaccines has remained largely stable against key outcomes, namely hospitalization for serious illness and death.¹ This unprecedented success against COVID-19 has had the unexpected consequence of bringing numerous ethical issues into sharp focus and forcing us to consider our approach to public health policy carefully in times of crisis. We have been faced with impossible dilemmas: choosing between censorship and allowing the propagation of online misinformation, as well as weighing our regard for bodily autonomy against the demands of community responsibility. Both calculations rely on our ability to assess and balance risk. Here, we will discuss reasons for vaccine hesitancy and propose that the health care establishment should respond to vaccine sceptics (among them, many health care professionals) with compassion and empathy, and never anger or derision.

Some of the issues surrounding our approach to vaccines are practical. Urgently mandating COVID-19 vaccines for health care workers is both necessary and legal²—even if no decision is likely to please all parties. British Columbia, Alberta, Ontario, and Quebec have already implemented such edicts for health care workers, although the BC Nurses' Union has opposed such measures.³ The approach to nonadherence in individual hospitals has ranged from mandatory education sessions to reassignment, disciplinary action, and even outright dismissal.⁴

In the midst of this, one well-regarded (and presumably well-intended) national health reporter has conspicuously described a supposedly “growing rage” among the vaccinated while characterizing antivaxxers as “irresponsible, unethical, skeptical ... lazy” and prone to “whining and self-pitying bellyaching.”^{5,6} For health care workers this hostility often becomes even sharper under the pretense that doctors and nurses who have witnessed the grief of the pandemic first-hand should certainly know better than to put others at risk. Even if these criticisms were accurate, however, such attitudes would still be both unhelpful and unbecoming of compassionate citizens and empathetic health care professionals.

Compassion

Vaccination rates are generally high among health care workers, although they vary among professions. In the United States, 96% of physicians were fully vaccinated in September 2021, although this compared poorly with fewer than 50% of nurses and 26% of home health aides.⁷ While training and experience vary widely among individuals, this suggests that health care workers are not equally vulnerable to the misinformation propagated in mainstream and social media. At one extreme, an elite academic few may be able to appraise primary data critically as it is produced; at the other extreme, some training programs provide little formal training in reading literature, interpreting statistics, and balancing risk. Given the constraints of a lack of time, a lack of peer support, and limited knowledge and skills in research,⁸ some in the latter group may be as vulnerable to misinformation as anyone in the general public. With few exceptions, being apprised of the rapidly evolving state of medical knowledge is not simply a matter of setting aside the time to catch up. It requires a critical skill that may have been neither taught nor learned.

Both health care professionals and the general public rely on numerous competing sources for their vaccine knowledge. The quality of this information is highly variable. At the highest tier, primary data published in peer-reviewed journals is often of high quality, but it is inaccessible to all but a tiny academic elite and it is produced in a quantity that would be overwhelming to consume. Secondary literature (in the form of evidence summaries, meta-analyses, and systematic reviews) has the benefit of integrating multiple primary sources to draw broader conclusions, but it carries the substantial weakness of introducing additional bias in their interpretation. Reviewing either type of literature requires specific literacy in which even physicians and academic nurses may have limited training outside of their professional programs.⁹ Meanwhile, those outside these privileged groups are left combing through a patchwork of competing sources ranging from mainstream media to social media and personal experience.

Mainstream media outlets draw on the secondary sources described above, but they also cherry-pick liberally from primary sources, unvetted preprints, and gray literature. This can create distortions, exaggerations, and click-driven narratives that may mislead while still containing elements of truth. Social media

algorithms further fine-tune these distortions, feeding consumers ever more polarizing versions of online content that their moral lens may already be biased toward and creating echo chambers in which alternative perspectives are rarely heard. With platforms such as Facebook more aggressively censoring English-language conspiracy peddlers than those in other languages,¹⁰ misinformation disproportionately reaches the minority and immigrant communities who compose a substantial proportion of long-term care workers, and this feeds existing scepticism that may have both recent and deeper historical origins.^{11,12} Alternatively, some encounter the “intelligent misinformers”: seductive content creators such as Bret Weinstein, Robert Malone, and others whose training, eloquence, and argumentation lend them a superficial air of credibility. With limited medical literacy (or with limited time at their disposal while balancing front-line clinical activities and family obligations), many health care professionals have little ability to defend against this battery of poor-quality information.

How should we respond to well-meaning Canadians who navigate this tempest and emerge with vaccine hesitancy? With open dialogue. The important irony is that antivaxxers can be highly informed, well educated, and confident in their grasp of a wealth of deeply flawed information. While it is reasonable to challenge the quality of their source material, casting such a person as lazy or stupid will produce only greater resistance and division. Sceptics take pride in their fluency in a complex belief system produced by equally complex environmental factors—which must be compassionately understood and acknowledged before any progress can be made.

Empathy


Other health care professionals might view themselves as exceptions to the rule of multiple-dose vaccination and, in some cases, they have a reasonable point. Given their front-line exposure over the past 2 years in emergency departments, hospital wards, and intensive care units, nearly 95,000 Canadian health care workers had already had COVID-19 by June 2021,¹³ representing approximately 10% of the health care work force. While they would likely benefit from a single vaccine dose, their acquired immunity makes it challenging to argue that their presence imminently endangers patients.¹⁴ Suggesting otherwise is likely to fuel resentment and mistrust. Likewise, despite the demonstrated safety of the vaccines in pregnant people,¹⁵ the prospect of vaccination during pregnancy causes instinctive, understandable concern among this population. Finally, personal experience forms an important anecdotal driver of attitudes toward medicine, including vaccines: the idiosyncratic adverse event that a family member or friend swears to can have as much of an emotional impact on opinions, fears, and attitudes as more objective,

rigorously produced, and randomized and controlled data. Addressing these pragmatic concerns with anything short of profound empathy is unkind.

Humility

The health care community needs to acknowledge with humility its own role in sowing confusion around vaccines. The common antivaxxer trope that the vaccines simply do not work was magnified by an earlier narrative suggesting that vaccines prevent serious disease but not necessarily infection, as well as widely circulated data suggesting that the vaccinated remain as infectious as the unvaccinated.¹⁶ Neither claim is true. Likewise, the loaded term *breakthrough case* incorrectly implies failure when a vaccinated patient contracts a mildly symptomatic infection, rather than the success that it is. Finally, political and pharmaceutical pronouncements of boosters and vaccine mandates before their formal Food and Drug Administration or Centers for Disease Control and Prevention approval¹⁷ have further diminished public trust that regulatory bodies have not been compromised. Addressing these missteps requires consistent messaging: namely, that vaccines prevent a great deal of infection, serious disease, and death.

A final note: We do vaccines no favours by dismissing their critics. As is the case with any biologically active agent, vaccines are not without side effects and risks; in the case of the messenger RNA vaccines (ie, Moderna, Pfizer), this means rare myocarditis events in young males,¹⁸ and in the case of those vaccines using an adenovirus vector (ie, AstraZeneca, Johnson & Johnson), this means occasional episodes of vaccine-induced thrombotic thrombocytopenia.¹⁹ Without an atmosphere of open dialogue, adverse events may be hidden or minimized owing to legitimate fears of being branded an antivaxxer, and doctors may become more reluctant to take adverse events seriously. Vaccines are safe, but not because they are inherently different from any other potentially dangerous medicine. They are safe because of experience, scientific scepticism, and constant vigilance, each of which plays a critical role in our robust system of vaccine monitoring and safety.

Our own responsibility is to respond to vaccine-hesitant individuals with profound compassion, patience, and respect. Where coercion unfortunately becomes necessary, our empathy develops an even greater importance. Understanding and discussing both reasonable and unreasonable arguments for scepticism—even when our policies may not yield—is essential for building trust among the public and among our fellow health care professionals. 

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Competing interests
None declared

References

- Lopez Bernal J, Andrews N, Gower C, Gallagher E, Simmons R, Thelwall S, et al. Effectiveness of Covid-19 vaccines against the B.1.617.2 (delta) variant. *N Engl J Med* 2021;385(7):585-94. Epub 2021 Jul 21.
- Flood CM, Thomas B, Wilson K. Mandatory vaccination for health care workers: an analysis of law and policy. *CMAJ* 2021;193(6):E217-20. Epub 2021 Jan 19.
- Clarification: union response to mandatory vaccination announcement. Burnaby, BC: BC Nurses' Union; 2021. Available from: <https://www.bcnu.org/news-and-events/news/2021/clarification-union-response-to-mandatory-vaccination-announcement>. Accessed 2022 Feb 11.
- Wilhelm T. Unvaccinated staff at Windsor-Essex, Chatham, Sarnia hospitals face firing. *Windsor Star* 2021 Sep 3.
- Picard A. Vaccine mandates without teeth are just performative promises. *Globe and Mail* 2021 Aug 23.
- Picard A. Quebec's decision to delay COVID-19 vaccine mandate for health workers is an insult to patient safety. *Globe and Mail* 2021 Oct 13.
- Emanuel EJ, Skorton DJ. Mandating COVID-19 vaccination for health care workers. *Ann Intern Med* 2021;174(9):1308-10. Epub 2021 Jul 30.
- Roxburgh M. An exploration of factors which constrain nurses from research participation. *J Clin Nurs* 2006;15(5):535-45.
- Godwin M, Seguin R. Critical appraisal skills of family physicians in Ontario, Canada. *BMC Med Educ* 2003;3:10.
- Zakrzewski C, De Vynck G, Masih N, Mahtani S. How Facebook neglected the rest of the world, fueling hate speech and violence in India. *Washington Post* 2021 Oct 24.
- Lasco G, Yu VG. Communicating COVID-19 vaccines: lessons from the dengue vaccine controversy in the Philippines. *BMJ Glob Health* 2021;6(3):e005422.
- Eissa A, Lofters A, Akor N, Prescod C, Nnorom O. Increasing SARS-CoV-2 vaccination rates among Black people in Canada. *CMAJ* 2021;193(31):E1220-1.
- COVID-19 cases and deaths in health care workers in Canada. Ottawa, ON: Canadian Institute for Health Information; 2021. Available from: <https://www.cihi.ca/en/covid-19-cases-and-deaths-in-health-care-workers-in-canada>. Accessed 2021 Oct 15.
- Lumley SF, O'Donnell D, Stoesser NE, Matthews PC, Howarth A, Hatch SB, et al. Antibody status and incidence of SARS-CoV-2 infection in health care workers. *N Engl J Med* 2021;384(6):533-40. Epub 2020 Dec 23.
- Shimabukuro TT, Kim SY, Myers TR, Moro PL, Oduyebo T, Panagiotakopoulos L, et al. Preliminary findings of mRNA Covid vaccine safety in pregnant persons. *N Engl J Med* 2021;384(24):2273-82. Epub 2021 Apr 21. Erratum in: *N Engl J Med* 2021;385(16):1536. Epub 2021 Sep 8.
- Acharya CB, Schrom J, Mitchell AM, Coil DA, Marquez C, Rojas S, et al. No significant difference in viral load between vaccinated and unvaccinated, asymptomatic and symptomatic groups when infected with SARS-CoV-2 delta variant. *MedRxiv* 2021 Oct 5. Available from: <https://www.medrxiv.org/content/10.1101/2021.09.28.21264262v2>. Accessed 2022 Jan 31.
- Owermohle S. Biden's top-down booster plan sparks anger at FDA. *Político* 2021 Aug 31.
- Clinical considerations: myocarditis and pericarditis after receipt of mRNA COVID-19 vaccines among adolescents and young adults. Atlanta, GA: Centers for Disease Control and Prevention; 2021. Available from: <https://www.cdc.gov/vaccines/covid-19/clinical-considerations/myocarditis.html>. Accessed 2022 Feb 3.
- Kelton JG, Arnold DM, Nazy I. Lessons from vaccine-induced immune thrombotic thrombocytopenia. *Nat Rev Immunol* 2021;21(12):753-5.

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