

What to say at the intersection of vaccine hesitancy and conspiracy theories

by Vanessa Brcic MD CCFP



The resurgence of conspiracy theories during the COVID-19 pandemic had me revisit an article in CMAJ last year entitled [Vaccines, values and science](#). Dr. Maya Goldenberg, a professor of philosophy, eloquently argues for shifting the focus from science literacy, to legitimate concerns about industry ties to medicine and mistrust in the profession. Addressing mistrust (or, building trust) is an artful practice at the heart of family medicine. With additional training in counseling therapy, I have an interest in how fear and trust affects choice, and why a person's lens might focus on the individual rather than the collective. In this letter to people doubting science, I try to dismantle the "hard line" that we sometimes set when faced with science denialism, including that which can be found at the intersection of vaccine hesitancy and conspiracy theories about the pandemic.

Building trust while doubting science: a family doctor's perspective

As time passes in a pandemic, uncertainty grows and the normal is stripped away. Many people are disoriented or worn thin. There are many reasons to think "Enough already, I don't want this." It is a normal human reaction as the ground shifts under us. For many people - [half](#) of the population of the US, probably the [same](#) in Canada - casting doubt on mainstream messaging (including science) resonates with our discomfort.

With society turned upside down in a heartbeat, it makes sense to ask "WTF is going on?" Many people have also been curious about [alternative or conspiracy theories](#), wondering what we're not being told. Critical thinking is engaging in a time of isolation, and blind trust in authority isn't healthy either, so no one is to blame.

This questioning is an understandable part of human nature, but it directly or indirectly implicates doctors and the medical system. So, hear me out. Critical thinking and shared decision-making with patients isn't new to us. Distrust in doctors, or in the systems we work in, has been something we've been working with for years; for example, the fear and hesitation to use pharmaceuticals, including vaccines.

As a family doctor, I get it. It is a way of saying "no" (or, "I can't do this"), and I hear you. I will not alienate you or dismiss your views (although some of us find this harder than others). With your doubt, you're also shedding light on [declining trust](#) in biomedical systems - particularly corporatization and financial bias. This is an important concern.

But something else is going on, too. Questioning whether things should be different in these challenging times is comforting. It gives a measure of control back in a time of uncertainty. And depending *how* it is done, it can either engage us in democracy, advocacy, or shared decision-making or it can be harmful to our greater good, creating chasms between us. Let's explore why critical thinking is important, and how it can cause harm, so we can stay together in this.

1. We all want an outlet for our fear

There is so much to be worried about in our society. There is a baseline anxiety that affects all of us - especially

during a pandemic - however privileged we are to cope with it. Moreover, our children face great uncertainty about the future of the human life on earth, and they are **further marginalized** by social and economic policies that take away meaningful hope and opportunity. The planet is suffering from pollution, degradation, and political inaction on climate change, and the impacts of all of this on health are significant - but it is under-researched (because in a capitalist system this doesn't earn profit), and it is also difficult to research (so many variables).

We know that pollution affects soil and water, concentrates upward in the food chain, but we all have to eat and drink and walk on the ground, and practically speaking, it's not possible to protect yourself from most "chemicals" (many of which are natural elements, like **aluminum**), no matter how wealthy you are. Living with this fear that doesn't have an easy outlet, it is easy to project it on someone (triggers, confrontations, arguments), or something (like vaccination).

Briefly, on vaccines. (Notice your level of mistrust here. There's a lot of evidence to consider, which is hard if mistrust is high.)

- Yes, there are preservatives (but they are well studied, **naturally derived**, and **far less** than we would imbibe through **water, food, or breast milk**).
- Yes, it's not the same kind of 'natural' immunity we would get if we got the disease (for childhood vaccines, the immune response is generally **better**, with less incidence of **serious sequelae**).
- Yes, we are giving vaccines in capitalist societies in which people earn **profit** from producing and selling them (this is not conspiracy, but a problem with capitalism, and why we many of us are fighting for **publicly funded solutions** and **cutting ties with industry**).

People have fear about safety, which I understand. Should more research be done on adverse effects of drugs? **Yes**. But denying that vaccines work to prevent and eradicate disease denies something **science** has studied well, for a long time. We have high quality information on vaccines - which isn't always the case as medicine and other disciplines are in **evolution**, with **flaws**. But if your mistrust is high, the quality of the information doesn't matter as much as something that validates your fear, and tells you it's real.

But if you don't have the mental space to think through the information, or if you believe that there flat-out isn't any truth where the science is solid, you are closed down. Disengaged. You're out. That's it. Conversation over. And in that rejection, you continue to live in fear. And fear and **stress** also have a lot of research that supports multi-system, psycho-neuro-immuno-endocrine symptoms - the same symptoms that people describe in response to being vaccinated, and that are perpetuated when people don't acknowledge and work through their own fears. So, no matter your level of doubt, working on building trust with someone in medicine who is willing to talk and listen, is **critical**.

2. Rejection precludes advocacy for something better

By rejecting entire systems of knowledge, you're also disengaging or sabotaging (if from a place of unacknowledged fear) relationships with people who want to help - people who provide health care, people who are looking out for the health of our communities (public and population health officials, policy-makers), and people who are advocating and fighting for better systems.

Consider drug industry profits, for example. Some drugs are essential and save lives, but many offer **minimal or overstated** benefits. The pharmaceutical industry is hugely profitable and it is no secret that they operate in **ethically challenging terrain** of trying to earn profits for their shareholders, while making "useful" drugs or devices. It is no secret that their coffers allow them to fund research designed to show that their drugs work (however clinically insignificant), and that they avoid producing useful but **less profitable** drugs. But this is one

thing we're generally good (and getting better) at in family medicine. The **Choosing wisely** movement is a good example of such progress. Writing off "Big Pharma" and using natural remedies (AKA "Big Herba") just puts dollars in the pockets of different **problematic companies** subject to the same perverse capitalist incentives.

What we need are advocates, not drop-outs. People who know how to **navigate the grey zone** and sort through information to pick out what is useful and what is not. Learning critical appraisal is empowering, and builds relationships when done together (just like uniting in science denialism can do). We need people to advocate for public oversight to ensure affordable supply of important drugs and avoid wasting money on others. We also need people to fund and do research that matters (including about **health impacts of radiofrequency fields and other technology**). Those of us advocating for a national **pharmacare** strategy in Canada, for example, are fighting to implement it in a way that will make a real difference. And **others** are educating doctors and other health care providers about how to prescribe only what actually works. You can't work for a better system if you reject (and slander) the system. Yelling at (or about) someone rarely gets you what you want.

3. Denialism chooses self over the collective (and isn't honest about it)

Brace yourself for some hard truth - People who decline vaccines benefit from **herd immunity**. So, it's okay for other kids to receive vaccines so that they don't have to vaccinate their own children.

If you decline vaccination, I invite you to think about the collective. Do you want everyone to do the same? It is important to acknowledge the context in which you are making your choice. Denying the benefits of herd immunity puts blinders on as you make your own choice. And if you want everyone to join you and stop vaccinating, then we ought to come together in a serious public conversation about our willingness to accept (and how to treat) the significant disease and death in children and other vulnerable groups that would occur.

We must consider individual and collective benefits of our choices. The health benefits of **doing good for others** are well studied. Herd immunity, and self-isolation during the Covid-19 pandemic, are examples of how acting together confers collective and individual benefits. And we're imperfect, learning from the intersection of these collective actions. Who is being further marginalized by the pandemic response, and how can we help them? **Is it possible** to achieve herd immunity without a vaccine, and without a larger-than-we-can-accept death toll? We will learn from varied responses globally as longer-term data emerges (but if it's all a hoax, maybe we shouldn't bother). Governments and public health experts had to act fast, before we knew much about the virus. So, we chose to act in solidarity to protect the most vulnerable. There is inspiration in solidarity, in all of us being on the front-line by staying home, acting for the collective good. Have you felt it?

As the weeks roll on, we start asking more questions. How much are we willing to sacrifice to protect the lives of our most frail and elderly, many of whom were isolated before this period of isolation? How much are we willing to sacrifice to protect the lives of younger people who are already sick, many from illnesses imposed by inequity and poverty? What **dangerous ideas** are threatening our recovery? Is there a vision for something **much better**? There is so much to fight for, so much work to do, and we aim to do better, without abandoning the most vulnerable.

We need constructive, compassionate, evidence-informed dialogues about how to manage health and social problems. People who believe that virology or immunology are a hoax simply aren't part of this conversation. If you believe that someone is lying to you, or if you dig your heels in with the weight of your mistrust, you won't engage, or you are too difficult to engage with. And then, you aren't in conversation. You're not alongside, working **creatively** and together for **a better world**. And if you're not isolating or not vaccinating, it may be that you can't, because you don't have secure housing or access to health care, or maybe it's because you are putting yourself first.

4. Rejection and denialism avoids important conversations and big questions

We have failed to acknowledge as a society that suffering and death are the only things that are guaranteed to happen. We pretend that it doesn't happen, so we aren't prepared for it. What does it mean to die well? To grieve losses as we age so that we can be open to new beauty, and receiving the kind help of others? Vulnerability is hidden and denied; we don't know how to support one another in grief.

Uniting in anger and distrust also precludes important conversations with yourself and others about grief, vulnerability, and ethics - this requires openness. Like the denial of collective responsibility for a better world, it denies the opportunity for conversation about how we want to look after each other through life's inevitable pain and loss. This is too hard to do when you are busy pushing people away, especially those who are there to help you.

We are at an intersection involving action from epidemiologists, virologists, health care staff, food producers and distributors, policy-makers social justice advocates, and all citizens. This is an exciting time for a conversation about how to help each other and do better. Managing the virus in the best way we can is taking a lot of bandwidth and sacrifice, and there are many other important issues that could benefit from concentrated action that we have rallied for in COVID-19. Let's come together to keep up the momentum. There is much to learn, and we are all doing the best we can.

Dr. Vanessa Brcic is a Vancouver-based family physician, UBC Clinical Assistant Professor, community-based researcher, and graduate of the UBC Clinician Scholar Program. She is active in the community, currently as the co-Founder and current co-Chair of Basics for Health Society, and as a Research Associate with the Canadian Centre for Policy Alternatives (BC office). She has a special interest in safe, compassionate and equitable health care, and the social determinants of health. Clinically, her work is focused on the interdisciplinary care of vulnerable patients and those with complex chronic conditions; she brings to this work insights from her own experience as a patient, as well as additional certification in relational somatic therapy for trauma, and GunnIMS for chronic pain. She also has a growing interest in contributing to the growth of culturally safe care for Indigenous peoples.