IT'S WORTH A SHOT: FIGHTING VACCINE DISINFORMATION IN EDMONTON'S MARGINALIZED COMMUNITIES

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"You think it's a good idea to get it? The jab?" It was a hot day in late August 2021. Our team had taken over a church parking lot on Edmonton's Alberta Avenue. We had two things on offer: free hot dogs and COVID-19 vaccines. The vaccines were being delivered out of a modified sprinter van, no appointment necessary: frictionless, street-level access. You didn't need to get a vaccine to have a hot dog, but the proximity was by design. The gentleman who approached me had eaten two hot dogs already.

"The vaccine—my cousin said it's gonna kill me. It's not gonna kill me, is it?"

"Yes, I do think you should get the vaccine," I told him. "No, it isn't going to kill you." He thought about it, then walked over to the van and rolled up his sleeve. First dose. I saw him grab at least three more hot dogs before he left.

Mr. Hot Dog attended one of many clinics we hosted throughout Edmonton: in parking lots, in schools, shopping malls, community leagues, and cultural organizations. Our vaccination projects, funded once from May to December 2021 and again in May and June 2022, had an acute focus on immigrants and refugees, as well as urban Indigenous peoples—groups that were statistically less likely to be vaccinated.[1,2]

Throughout our work, disinformation cast a long shadow. Disinformation represents a terrible challenge for public institutions: it is difficult to track and harder to prevent. Community members told us, softly or through interpreters, that COVID-19 could be prevented by garlic, infrared lights, hot showers, or prayer. They heard on good authority, from friends or church or WhatsApp, that the vaccine was much more dangerous than COVID-19 itself. Still, we were able to encourage people to be vaccinated—wherever, however, and whenever we could.

Over the last several years of grassroots vaccine promotion, my team and I have had the chance to develop several key lessons:

LESSON 1: DISINFORMATION IS NOT A LACK OF INFORMATION

Many publicly-supported disinformation strategies presume unscientific or harmful beliefs are a result of *insufficient* information—that if only enough people knew the efficacy rate (high) or the complication rate (very low), they would make the reasonable decision to be vaccinated.

In this "lack of information" model, the solution to disinformation emphasizes repeating functional information, fact checking, and other concrete truths.[3] An example of this strategy would be a billboard saying: "Actually, vaccines *are* safe and effective." While well-intentioned, this is a naïve approach to disinformation. It neglects the emotions that enable disinformation to take root in the first place.

LESSON 2: DIFFERENT COMMUNITIES RECEIVE DIFFERENT DISINFORMATION

Many immigrant and refugee communities do not engage with English-language media, meaning they are influenced by different disinformation than their English-speaking peers. While Canadian public health refuted American disinformation (hydroxychloroquine and later ivermectin), international disinformation was seldom addressed.

Consider conspiracy—after all, vaccine-focused disinformation is a leading factor in vaccine hesitancy. A report published in *Nature* in 2022 noted that 57% of survey respondents had been exposed to "conspiratorial misinformation such as COVID-19 vaccines are harmful and dangerous."[4] Some of these conspiracies have entered the popular consciousness—COVID-19 vaccines' alleged connection to 5G, microchips, Bill Gates.[5]

Beyond these "typical" examples, some disinformation targets specific groups. For example, there was a persistent rumour that COVID-19 vaccines were made of pig's blood or pig's stem cells, rendering it haram for Muslims to consume,[6,7]; from Orthodox Christians, we heard that the vaccine was the Biblical Mark of the Beast, a marker of allegiance with the Devil at the end of the world.[8]

Unfortunately, these international disinformation streams were seldom addressed domestically. Not once did I hear a Canadian official identify the 2013 coerced sterilization of Ethiopian migrants in Israel with Depo-Provera as a prospective source of doubt in vaccination.[9] (I heard this from clients two or three times a week, particularly as Israel led the world in vaccine uptake, and concurrent anti-Semitic narratives about vaccination were widely propagated.) Never once did I hear about Russia's use of vaccine disinformation as a weapon of war since at least the Invasion of Crimea in 2014;[10] clients often spoke about their fears of vaccination in talking points lifted wholesale from this propaganda.

State-sponsored disinformation about vaccines is a contemporary reality, and many of these intentionally target the developing world.[11] Canadian authorities cannot fight against only English-language or Western disinformation.

LESSON 3: RECORDED SIDE EFFECTS AREN'T WHAT CLIENTS FEAR

As the pandemic wore on, it became evident that "vaccine side effects" had a different meaning for public health and the general public. When a public health official describes side effects associated with vaccinations, these are typically mild and expected (low fever, sore arms) and unusual but documented (heart inflammation, AstraZeneca's blood clots).

By contrast, clients disclosed to us that their concerns about vaccines were much more conceptual—that they feared side effects which would appear years or even decades later. A common conspiracy which spread widely through Facebook said that the COVID-19 vaccine had been reviewed with comparably poor scrutiny to Thalidomide.[12] (After refusing a vaccine, one client told me with deep sadness that it was too late for me: "Your babies will be born with gills.")

If clients fear fetal abnormalities, they do not feel reassured when government mentions the risk of minor aches. It is incumbent on public health to understand, respond to, and specifically refute what their clients fear—especially when it has no basis in fact.

LESSON 4: CHANGE IS HARD TO JUSTIFY

To communities with limited scientific literacy, changes in policy are often understood as previous *lies*. This is based on the incorrect belief that the government or public agency always knew all the information—that reversals, shifts, or changes are intended to deceive, not based on changing information.

For example, a policy shift from two-shot series to a three-shot (and now four-shot) booster was read by many communities as evidence of medical impropriety—i.e., that the two-shot series was a "trick," an inevitable prelude to more and more and more vaccines. Encouraging the suspicious general public to "trust the science" is a herculean effort; explaining that science is not a fixed list of rules is harder still. This challenge was perhaps best demonstrated by the low uptake rates for children under 12, once available.

One mother told me, "Miss Lisa, if children needed the vaccine, you would have had it ready for us from the start. You would have made sure." Imagine being the person who needs to explain age-differentiated clinical trials and testing standards, in a crowded community hall, in the client's third or fourth language!

LESSON 5: GRASSROOTS VACCINE WORKERS WILL BE THE TARGETS OF HARASSMENT

Our team encountered significant vitriol from anti-vaxxers. Posters were defaced; online posts were swarmed with anti-vaccine commenters threatening everything from murder to civil war. (My favourite non-sequitur: I emailed an invitation to a vaccine clinic; one client wrote back *YOU CAN F—ING DRINK IT!*)

In darker moments, the comments felt more menacing. Some comments evoked the Nuremberg Code of WW2,[13] claiming COVID-19 vaccines were comparable to Nazi experimentation—and that those who promoted vaccines would be tried and hanged like Nazi officers.

A man telephoned our clinic, called the receptionist a homophobic slur, and threatened we would "answer for our crimes against humanity." In his threat, he borrowed language from the Children's Health Defense Fund,[14] a notorious anti-vaccine website. Perhaps inspired by the same, a protester came to our office and yelled that we were "conducting illegal medical experiments on children." I had to threaten to call 911 before she would leave.

Despite this, the team's spirit was irrepressible. We regrouped; we sent promoters out in pairs; we looked for exits; we learned who was reluctant and who was volatile.

I reminded my team to ignore the comments. I reminded them that their work was valuable, lifesaving, and precious.

LEARNING 6: FREE FOOD WON'T CURE ALL OF DISINFORMATION'S IMPACTS, BUT IT'S CERTAINLY WORTH A SHOT

In June 2022, we hosted an event at a school favoured by newcomers, including many refugees. We covered our reception area in Middle Eastern chocolates, candies and chips, handpicked by our team member, himself a Syrian refugee. One family in attendance all received first doses: mother, father, and three children.

I asked them, "Why did you choose to get the vaccine today? Why not ever before?"

The mother paused and popped a chocolate in her mouth. She said to me: "You are here, you are nice. The nurse speaks my language. And you give food."

Despite all the work our team did to dispel myths, translate materials, and provide explanations, one technique got more shots into arms than anything else: a free meal, a quick chat, and a smile. How can you be scared when you break bread?

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