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Communicating COVID-19 vaccines: lessons from the dengue vaccine controversy in the Philippines

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INTRODUCTION: THE DENGUE VACCINE CONTROVERSY

In 2016, the Philippines embarked on an unprecedented mass immunisation campaign against dengue fever, becoming the first Asian nation to authorise the commercial use of Dengvaxia, the dengue vaccine manufactured by the French pharmaceutical Sanofi Pasteur.¹ In December 2017, nearly 2 years since the campaign started, Sanofi announced that Dengvaxia may actually cause ‘more severe disease’ in those who have not had previous dengue infection.² By then, over 800,000 Filipino schoolchildren had been inoculated.¹

Criminal investigations against involved government figures ensued, with one critic likening the mass vaccination programme to a ‘genocide against Filipino children’.³ The deaths of several children who had received the vaccine became a focal point of the scandal, as the Public Attorney’s Office ran a highly publicised and dramatised investigation, from televised autopsies to the chief lawyer appearing alongside the grieving mothers in media interviews.^{3–5} The resulting ‘crisis of confidence’ against the public health sector sent immunisation rates plummeting to an all-time low, precipitating a measles outbreak across the country, exacerbating already-low immunisation rates.⁵

What went wrong, and how could a different—or more deliberate—communications strategy have contributed to averting those mistakes? In this article, we identify several lessons on health communication from the dengue vaccine controversy that may prove beneficial in light of the COVID-19 pandemic, given the emergent parallels between the two health crises.

TRUST AND CREDIBILITY

Fundamentally, effective health communication entails trust between the public and the

Summary box

- ▶ As countries around the world begin to roll out COVID-19 vaccines, vaccine safety communication is more relevant than ever.
- ▶ The dengue vaccine controversy in the Philippines offers lessons that can be applied to immunisation programmes being organised today to address the COVID-19 pandemic.
- ▶ Effective vaccine safety communication entails (re) building relationships of trust between government and the public, upholding the credibility of scientific institutions and maintaining transparency.
- ▶ It also involves viewing health against the broader framework of equity, using an interdisciplinary approach to health communication and putting a premium on public feedback.

scientific community. Building confidence in vaccines ‘implies trust in the vaccine (the product), trust in the vaccinator or other health professional (the provider), and trust in those who make the decisions about vaccine provision (the policy-maker)’.⁶ In other words, trust springs from credibility.

One way to do this is through deference to non-partisan, expert institutions and upholding the credibility of these institutions. In the dengue vaccine controversy, this was seen in the involvement of the Philippine General Hospital’s independent panel of experts who became the de facto unbiased inquisitors of the sensationalised turn of events. Unfortunately, though their investigation virtually exonerated the vaccine from the deaths of the children, these experts had to compete with many other voices, mostly from government, that only undermined whatever authority they may have held during the crisis.

Under COVID-19, the importance of letting scientific institutions take the lead in communications cannot be overstated. These institutions remain our most credible sources of information; thus, they must lead



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without interference—or *perceived* interference—from partisan figures. Politicians may help inspire public confidence towards vaccination, but too often they engage in medical populist tropes, such as passing off unfounded knowledge claims as facts, that are damaging to the scientific institutions.^{3 4} Left unchecked, these political tactics result in ‘vaccine messianism’, where politicians overemphasise their faith in vaccines, obscuring what the scientific community has actually proven thus far.⁷ And a public that views vaccines as mere political tools being wielded by actors in power, as what transpired during the dengue vaccine controversy, will only end up rejecting a vaccine, no matter how efficacious.

TRANSPARENCY

Related to trust and credibility is transparency, which entails a consistent effort to disclose necessary information from all parties in any health-related endeavour. This means not just being upfront about factual information—the science of newly manufactured vaccines, their risks and limitations—but also about the circumstances with which they will be given to an anxious public.

The late disclosure of the dengue vaccine’s potentially life-threatening effects led to accusations of lack of transparency and widespread speculation that the programme, with its multibillion-peso funding, was in reality railroaded by corrupt practices.⁸ Separately, under COVID-19, violations of this cardinal rule of transparency have already transpired in the Philippines even before public vaccinations have started: in December 2020, it was discovered that no less than members of the Presidential Security Group had been injected with the yet-to-be-approved Sinopharm vaccines, smuggled from China; worse, a black market of illegal vaccinations among Chinese nationals in the country was apparently being tolerated by the government.^{9 10} These situations, instead of pre-empting feelings of suspicion towards vaccines, only worsen the public’s mistrust towards their government and, consequently, towards vaccines themselves.

EQUITY

Another important tenet is equity—the vulnerable and marginalised on equal footing with the privileged. In the dengue vaccine controversy, a point of inequity was initially raised by politicians who questioned the selection process for the programme’s implementation; why, during an election year, certain administrative regions were supposedly ‘prioritised’ over others.¹¹ Subsequently, inequity could be seen in the way local government units—some more resource-rich than others—were forced to intervene in the aftermath of the national communication breakdown.

A year into the COVID-19 pandemic, equity red flags have been raised again and again—from politicians flouting quarantine measures, to these same politicians abusing their authority and disregarding the ‘prioritisation list’ of the vaccination process.¹² At the same time,

news of numerous highly urbanised cities forging their own vaccination deals with international pharmaceuticals have raised fears that such undertakings will result to geographic inequity, with poorer cities and regions at a disadvantage.¹³ Equity in vaccine communication therefore entails looking at vaccination against the broader public health infrastructure, with clear guidelines, audience segmentation and targeted campaigns emphasising—and insisting on—universal access to the vaccines. This will not only streamline COVID-19 vaccinations, but in the long run, even improve coverage rates of existing vaccines.

PARTICIPATION AND FEEDBACK

Finally, effective health communication means accounting for participation and feedback. As shown by the dengue vaccine controversy, ‘expertise’ is not enough in the face of insufficient ‘buy-in’ from all concerned sectors, including within the scientific community.

Participation means recognising that vaccine hesitancy—and vaccine safety communication—involves not just the scientific community but every other institution across political and civil society. Against a predominantly Western framework of science communication, it will entail synchronous, interdisciplinary engagement among: primary care workers who know the situation on the ground (ie, hospital and community settings); social science and communications experts with the necessary tools to understand ‘local vaccine culture’—the root of people’s fears, distrust and (mis)conceptions regarding vaccines, as well as the healthcare system^{14–16}; media workers who must ensure that the information being relayed to the public do not get sensationalised or distorted; and even religious and civil society groups with established influence over their communities. Additionally, this will also entail ‘starting young’—integrating and emphasising the importance of healthcare communications into the training curricula of hospitals and medical schools.¹⁷

Most importantly, participatory communication means putting a premium on feedback, showing people that their government is responding to them. With the dengue vaccine controversy, the failure of government to preserve feedback mechanisms led to the rise of ‘moral entrepreneurs’ who manufactured competing narratives and overwhelmed communication channels, both in mass and social media.⁴

However, feedback can also be a means for authorities to know what the people are thinking—and thinking incorrectly. Under COVID-19, a vigorous feedback mechanism can pre-empt misinformation and disinformation, especially online.^{18 19} This means not just anticipating occasions of fake news but also occasions to be honest to the public regarding vaccine risks and failure. Not only for vaccine communication, but health communications in general, investing in improving feedback mechanisms has become an essential—and life-saving—path forward.

CONCLUSION

Vaccine mistrust is not irreversible; a study comparing vaccine confidence before and after the dengue vaccine was administered in the Philippines showed that while confidence levels had indeed plunged, they had also seen a relative, gradual increase, suggesting that attitudes can be swayed over time.²⁰

However, as the Philippine experience hopefully makes clear, especially for countries in similar straits, rebuilding trust in vaccines, and the healthcare system, is an arduous road forward, where partnerships between the authorities and the public must be re-established through transparent systems, on top of long-term investments towards the healthcare infrastructure. Politicisation must be avoided at all costs, and credible, non-partisan actors must be at the forefront of communicating the case for immunisation. Checks and balances must always be preserved, which means both the public—including the medical community—fulfilling its role as active, critical participants of the healthcare system and the government being accountable at all times for all its actions—and inactions. Absent such deliberate efforts, any vaccine produced to stomp the pandemic will only go to waste.

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