https://doi.org/10.1038/s41562-023-01720-8

Vaccine mandates and public trust do not have to be antagonistic

Vaccine mandates were widely used during the COVID-19 pandemic as a way to increase vaccination rates, but they risk public backlash and damage to public trust in vaccines. Historically, vaccine mandates and opposition to vaccines have co-existed, starting with smallpox vaccination mandates in the 1800s[1]. During the COVID-19 pandemic, the benefits of vaccine mandates were weighed against the potential damage to public trust[2]. But do mandatory vaccination and public trust need to stand in opposition or could they co-exist?

COVID-19 vaccine mandates increased vaccine coverage in most settings, but the protective effect was not homogenous across populations (for example, children)[3]. Public opposition to COVID-19 vaccine mandates was reported globally. This opposition has resulted in diminished uptake of standard childhood vaccines, as well as low public interest in COVID-19 boosters — even when access and availability are secure. Paediatric COVID-19 vaccination efforts were also challenged by a new wave of vaccine-hesitant parents, who constituted almost one-third of the parents in USA[4]. COVID-19 vaccine mandates are regarded by some as more harmful than beneficial, owing to the potential for long-term public discontent[5].

The optimal conditions for introducing vaccine mandates are difficult to define. It is evident, however, that not enough effort was made to explain the rationale for vaccination mandates during the COVID-19 pandemic and public consultations on how mandates could be optimized were not undertaken[5]. Instead, researchers and policymakers equated high vaccine uptake with proof that vaccine mandates are beneficial and overlooked how mandates can undermine public trust in the long term[2,5].

Vaccine mandates and public trust do not have to be antagonistic. Mandates can be harmonized to garner public acceptance and trust. For instance, the introduction of a school-entry vaccination policy in a Canadian province in 2019 received substantial public support because the policy emphasized the public health benefits of vaccination (such as reducing outbreaks) as opposed to being punitive (for example, imposing financial penalties for non-compliance)[6]. Particularly in light of recent measles outbreaks, the public seemed to appreciate the need for a policy proportional to the problem.

By contrast, in France mandatory school-entry vaccinations were extended in 2017 to address a declining vaccination rate[7]. Nonetheless, almost a quarter of the population showed an unwillingness to get the COVID-19 vaccine, which was correlated with political partisanship. Although this policy did not elicit an immediate public backlash, trust in vaccines has steadily eroded in many strata of society. France remains one of the more vaccine-hesitant countries, as identified in a global study in 2015 (ref. 8) and further demonstrated during COVID-19 pandemic[7].

Globally, COVID-19 vaccine mandates have neither built trust in vaccines nor avoided public opposition. Mandates remained controversial during the pandemic, as they incited resistance and polarization[5]. Studies from Germany and USA showed that COVID-19 vaccination mandates were likely to provoke anti-vaccination activism and even to reduce the uptake of routine immunization. Austria revoked draconian mandates after they failed to increase the vaccine uptake as had been hoped and instead triggered militant opposition in some populations. Mandates provoked pushback even from frontline healthcare workers in UK and Canada (unvaccinated health workers constituted 8% (73,000 people) and 3% (14,000 people) of the workforce in the UK and Canada, respectively), who refused vaccination even at the risk of losing their job[5]. Context is one of the determinants of public trust or mistrust around vaccine mandates. A recent qualitative study on COVID-19 vaccine mandates among British adults has shown how context and framing can shape the response to vaccine mandates[9]. More recently, a hastily implemented COVID-19 vaccine mandate in Beijing was withdrawn soon after a social media backlash.

Unsurprisingly, COVID-19 vaccine mandates are viewed more favourably by individuals who hold positive views about vaccination and vaccine-hesitant populations are likely to oppose vaccine mandates[9]. Ultimately, vaccine hesitancy is associated with having little or no trust in scientific governance and government institutions, and vaccine mandates similarly rely on public trust[10]. The presence of

public trust is thus essential for the successful implementation of vaccines[11]. For instance, Nepal offers a successful childhood immunization coverage that has contributed to trust towards the vaccination strategy and recommendations[12]. During the spread of Omicron variant of COVID-19 in Nepal, the government implemented a mandatory vaccination that reinforced the rationale for and trust toward the vaccine – consequently, the vaccination rate improved. One of the potential ways to optimize vaccine mandates is to explore and incorporate formal and informal feedback from the public, including being responsive to more covert rumours.

Although context is determinative of mandates and their outcomes, their use is also contested for ethical reasons as they can interfere with values such as bodily autonomy, freedom of choice and informed consent[5,13]. Policymakers who implement vaccine mandates should consider principles of effectiveness, necessity and proportionality. Policymakers should also consider whether there is a strong public justification and whether a less-intrusive policy would be a feasible alternative. Mandates also need to meet pre-conditions, such as sufficient evidence of vaccine safety, efficacy and effectiveness; justice in access and availability; and securing public trust[13].

The introduction of vaccine mandates must follow a systematic policy life cycle that offers an opportunity to revise the mandates at each stage. Policymakers should consider: (1) how mandatory vaccine policies are introduced into the policy agenda; (2) policy design; (3) policy decision making; (4) policy implementation (policy is put into practice, adjusted and tailored); and, finally, (5) policy evaluation[14]. Public engagement should be considered throughout the policymaking stages.

Before considering the implementation of mandates, governments should conduct extensive public engagement, including discussions with the public and relevant stakeholders to design acceptable and tailored policies for specific cohorts such as vaccine refusers who come from minoritized ethnic groups or religious groups, or who have particular political affiliations.

Finally, vaccine mandates are context-sensitive and are likely to change over time and place. It is critical that policymakers consult with the public and key stakeholders while formulating vaccine mandates. Ignoring context-specific concerns runs the risk of harming public trust towards vaccine and science in general. Policymakers should optimize vaccine mandates through extensive engagement so that they can garner support and trust from the population.

Maya J. Goldenberg[1], Bipin Adhikari[2,3] ✉, Lorenz von Seidlein[2,3], Phaik Yeong Cheah[2,3] & Heidi J. Larson[4,5]

[1]Department of Philosophy, University of Guelph, Guelph, Ontario, Canada. [2]Mahidol Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand. [3]Centre for Tropical Medicine and Global Health, Nuffield Department of Clinical Medicine, University of Oxford, Oxford, UK. [4]Department of Infectious Disease Epidemiology, London School of Hygiene and Tropical Medicine, London, UK. [5]Department of Health Metrics Sciences, University of Washington, Seattle, WA, USA. ✉e-mail: Bipin@tropmedres.ac

Published online: 26 September 2023

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Competing interests

The authors declare no competing interests.

Additional information

Peer review information *Nature Human Behaviour* thanks Rachel Gur-Arie and the other, anonymous, reviewer(s) for their contribution to the peer review of this work.