

PERSPECTIVE

Mandatory COVID-19 Vaccination: Lessons from Tuberculosis and HIV

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There is little doubt that vaccines represent one of the most significant medical advancements in human history, eradicating smallpox and averting millions of deaths from infectious diseases annually.¹ Nevertheless, they are currently undermined by the convergence of three pandemics: COVID-19, vaccine hesitancy, and internet-facilitated misinformation. This convergence has had a catastrophic cost across multiple dimensions: human lives, society and the economy, civil rights, individual rights, livelihoods, and access to essential health care services. At the same time, science has made tremendous progress. Within 12 months, pharmaceutical companies managed to develop, manufacture, and scale up access to COVID-19 vaccines, leading to the global distribution of several vaccines with proven safety and efficacy. However, as each new wave of infection approaches, vaccine uptake appears to be plateauing in many countries. In most settings, there is evidence that a significant proportion of people have so far chosen to remain unvaccinated despite the accessible and free delivery of vaccines. While many countries rapidly declared a state of disaster early in the pandemic, we are now seeing burgeoning national debates around mandatory COVID-19 vaccination and other COVID-19 precautions in democratic societies, where an argument is being made that autonomy, civil liberties, and individual rights are in conflict with the protection of public health and efforts to achieve population immunity.

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The enforcement of individual obligations to the community and restrictions on individual freedoms are not novel; service on juries, the use of seatbelts, and the prohibition of firearms have been integrated in different countries to varying degrees and are widely accepted as benefitting the greater good.2 Furthermore, in many settings, mandatory vaccination policies for children, tied to schooling, and mandatory influenza vaccines for health care workers are already in existence.3 By extension, could mandatory COVID-19 vaccination be similarly justified? Indeed, the introduction of mandatory COVID-19 vaccination would increase uptake, but its implementation could also increase public mistrust in governments and vaccine hesitancy. Further, the consideration of appropriate penalties for individuals who reject such vaccination raises complex human rights considerations.

Although governments could, in theory, consider the implementation of mandatory COVID-19 vaccination across their populations, selective approaches intended to yield the greatest protection for those at highest risk are more typical.4 In addition to any government requirements, many employers have also already instituted mandatory vaccination. For several reasons, the mandatory vaccination of health care workers has been the focus of much debate. The main reasons that led to the earliest vaccine mandates implemented among health care workers globally included (1) the protection of a scarce and skilled workforce on the frontlines; (2) the prevention of health-worker-associated outbreaks; and (3) the building of public confidence in vaccination.5 But today, more than a year after the COVID-19 vaccines became available, it is clear that this approach will not successfully contain the pandemic in such an interconnected world and that COVID-19 is likely to be with us for the foreseeable future. For example, workers in the retail, hospitality, travel, and beauty industries are also high-risk groups who have close human interactions daily. Moreover, corporate workers who may be appropriately physically distanced in the office-may utilize crowded public transport systems for their daily commute.

Therefore, global efforts to control and con-

tain the COVID-19 pandemic require a paradigm shift. Even in selected populations, mandatory vaccination is logistically challenging to enforce, particularly with an anti-vaccination movement at its peak, and also ethically challenging to justify, especially when accompanied by punitive measures for noncompliance.

The human-rights-versus-public-health arguments require further exploration where testing and mandatory vaccinations are concerned. Currently, mandatory testing is in place for COVID-19 in countries such as Austria, Ecuador, Greece, Indonesia, and Micronesia. During a major surge in COVID-19 cases in Austria in early 2022, Austria introduced mandatory vaccination for all eligible adults, with a fine of €3,600 for noncompliance. Although the mandate has subsequently been suspended alongside the waning of COVID-19 cases, the regulatory framework remains in place should the epidemic trajectory change. Ecuador became the first Latin American country to introduce mandatory COVID-19 vaccination for all eligible adults in December 2021. There, although private individuals face no punishment for noncompliance, venue operators of non-essential activities (such as restaurants and shopping malls) can be fined or shut down for allowing unvaccinated individuals to access their venues. In Greece, COVID-19 vaccination is mandatory for individuals over the age of 60 and for health care workers, who face escalating fines or dismissal, respectively. Indonesia introduced mandatory COVID-19 vaccination for all eligible adults in February 2021 via a presidential regulation, with a fine of US\$355 for noncompliance. Micronesia introduced mandatory vaccination for all eligible adults in August 2021, with a penalty of the loss of all forms of federal funding for noncompliance.

Before we had vaccines, many individuals understood the necessity of mandatory testing in order for certain liberties to be afforded to them. This included travel and visiting certain spaces, whether private or public. Now that some countries have access to vaccines, the discourse of mandatory vaccination has taken center stage. From an international and comparative constitutional law perspective, there is growing consensus that vaccine

mandates may be legal and ethically justifiable. The Lex-Atlas COVID-19 (LAC19) project, comprising a global network of 50 jurists, has concluded that mandatory vaccination and human rights law are compatible in principle.⁶ However, in-principle compatibility does not reduce the burden of establishing when vaccine mandates may be necessary, justifiable, and ethical. Further, implementing vaccine mandates in the face of government mistrust, high levels of misinformation, and vaccine hesitancy requires great care. Indeed, the LAC19 principles call for constructive public engagement, especially in dealing with reasonable vaccine hesitancy. Thankfully, various lessons can be learned from the global experience of other diseases, especially in the last three decades.

If the world has learned nothing about the ineffectiveness of coercive strategies where public health measures are concerned, one only has to look at the HIV and tuberculosis (TB) epidemics. For the former, the scientific community, which initially promoted bio-medicalized approaches, learned quickly that there would be no epidemic control without the leadership of HIV-affected communities. The introduction and scale-up of life-saving antiretroviral therapy was borne out of one of the strongest health movements the globe has ever seen. People living with HIV spearheaded interventions that were community led and owned. Those lessons continue to be a backbone for some of the world's largest and most sustainable HIV responses.7

This has come as a result of bottom-up responses, a focus on HIV treatment literacy, and a commitment to keeping people living with HIV well informed about the benefits of antiretroviral therapy. At the same time, people living with HIV continue to face stigma and discrimination. This includes restrictive measures such as travel bans from a number of countries.⁸ The HIV movement has instilled, across the globe, the necessity for rights-based, people-centered responses for any public health response to be effective. This has also gone a long way in ensuring the meaningful engagement of people living with HIV and the widespread acceptability of treatment, including

introducing a long-acting injectable regimen, which will revolutionize antiretroviral therapy. Notably, HIV advocacy groups are key proponents of the ongoing search for a successful HIV vaccine.⁹

Important lessons have been learned from the TB response too. TB is a disease of antiquity and continues to be highly bio-medicalized. Learning from the HIV movement, yet appreciating the nuances that differentiate the two diseases, the global TB response has required a complete paradigm shift from the biomedical paternalism of the past. From a public health standpoint, TB has remained a legally notifiable disease in many countries. As a result, persons with TB have been subjected to coercive measures in some countries, leading to forced isolation and involuntary detention as part of public health strategies for limiting disease transmission. In countries as diverse as Canada and Kenya, individuals have been imprisoned for non-adherence to their TB treatment.10 In the Kenyan case, this led to a class-action lawsuit by imprisoned men. Petition 329 (as the case is famously called) focused on the lack of rights-based responses to treatment and the abrogation of duty by the government to follow due process in terms of the isolation protocols required by the Kenyan Public Health Act. The court in the case found that involuntary confinement in a prison setting did not amount to isolation.11 Although the petitioners won the case, they were not rewarded due to their non-adherence to TB care. The judgment instructed the Ministry of Health to develop a rights-based people-centered isolation policy. Kenya's reformed Tuberculosis Isolation Policy was launched in Nairobi in June 2018 by the Ministry of Health and the National Tuberculosis Program.¹² The policy outlines the procedures to be followed in the isolation and admission of TB patients who interrupt TB treatment or refuse to take anti-TB medicine.

Even with urgency to invest in and advance community-centered and client-centric rights-based responses to TB, the World Health Organization's *Global Tuberculosis Report 2020* estimates that 10 million people developed TB in 2019. Broken down, 7.1 million (71%) were diagnosed and reported to national TB programs worldwide, leav-

ing a gap of 2.9 million undiagnosed people (29%).¹³ The TB community continues to grapple with finding people with TB, bringing them into care, and retaining them in follow-up care. The failure to prioritize and invest in rights-based approaches contributes significantly to why people affected by TB do not feel comfortable accessing TB services or completing their treatment.

Alongside COVID-19, multidrug-resistant TB (MDR-TB) remains another area of concern. A large proportion of people with MDR-TB are missing or not brought into sustainable care. According to the World Health Organization, out of an estimated 500,000 people with rifampicin-resistant or multidrug-resistant TB, 293,970 (59%) were missed due to inadequate testing for drug susceptibility, especially among people with new episodes of TB. Since 2020, the diagnosis, notification, and treatment of MDR-TB have been on a downward trajectory.14 While the reported cases of MDR-TB are falling, the true incidence of MDR-TB continues to increase due to various factors. The scientific community opines that this is a result of inadequate testing; however, several questions remain. Why are people not coming forth to be tested? Why do those who receive their results not want to be initiated on MDR-TB treatment? Why are so many people dying from a curable infectious disease? These are not philosophical questions. The answer is found in the way in which people are treated or in their perceptions of how they might be treated. Lengthy treatments aside, the lack of prioritization of human rights responses and the continuation of biomedical and coercive public health-based approaches remain the key problems. Today, there is a growing community movement of MDR-TB affected communities who have survived the disease. The MDR-TB community engagement tells us what works: the installation of rights-based, patient-centered responses to MDR-TB.15

The COVID-19 response since the start of the pandemic tells an unfortunate tale in terms of global solidarity and equitable access to COVID-19 therapeutics. While some countries (mostly high-income ones) have had access to the vaccines since late 2020 and are now implementing booster

shot strategies to fight the more virulent strains of COVID-19, other countries had not had the opportunity to provide a second dose of the vaccine to their populations by early 2022. Some middle-income and most low-income countries had been unable to access vaccines until as recently as early 2022. Thus, while countries such as the United Arab Emirates report a 96% vaccination rate of their population, less than 10% of Africa's 54 nations hit the 2021 year-end target of fully vaccinating 40% of eligible people.¹⁶

Global health inequities aside, the introduction of mandatory vaccination protocols is rising across the globe.¹⁷ Many countries started with staggered approaches, focusing on frontline workforces, public-facing service delivery workers, and other at-risk populations. What started as a trickle effect has now become a tidal wave of vaccine mandates, differing in form and intensity from country to country.

Importantly, a growing movement of individuals identify as part of an "anti-vaccination movement." This movement argues that vaccine programs are coercive and are government attempts to control the bodily autonomy of individuals and freedom of movement; as such, they amount to a violation of people's fundamental human rights. This conundrum raises two critical questions. One is whether these arguments of so-called anti-vaxxers are justifiable. The second is whether governments are looking for avenues to abrogate their duty of care by bluntly enforcing these mandatory vaccine measures and punishing people for refusing to comply. In many countries that have already started enforcing mandatory testing measures, there has been increasing resistance to the manner in which they are carried out. For instance, in November 2021, when 64% of the Austrian population was fully vaccinated (below the European Union average), the government implemented new restrictions, including the restriction of movement of those who refused to be vaccinated, while countries such as Australia and Latvia banned unvaccinated legislators from parliament. The list of countries adopting vaccine mandates continues to grow but includes few African countries. In this region, the

mandatory vaccination discourse is led by countries such as South Africa, Kenya, and Nigeria, where vaccines are accessible. Arguments for this restriction of freedom of movement include the fact that individuals who have not been vaccinated are more likely to transmit COVID-19 and contribute disproportionately to the burden of hospitalization. Governments argue that the intensification of mandatory vaccination protocols is due to the spike in hospitalization of unvaccinated people and that their intensive-care wards could rather be utilized for people who suffer from illnesses other than COVID-19. It remains undisputed that while vaccines do not completely stop the transmission of the more transmissible variants, they do circumvent hospitalization and death as a result of COVID-19-related complications.¹⁸ But to squarely blame those who have not been vaccinated and who have solid reasons why they do not want these vaccines seems a bit harsh and could be subject to legal scrutiny.

As restrictive measures intensify, the question arises whether restrictions on the freedom of movement of unvaccinated individuals has the potential to become not only a disincentive but also punitive, where access to essential services, for example, are available to vaccinated people only. A case in point is the Singaporean approach of barring the unvaccinated from free health care.¹⁹ Experts believe that the stricter the measures, the more they should be balanced against governments' own duty of care. In countries where vaccines are easily accessible and where governments are introducing mandatory vaccinations in stages, some companies and organizations have installed mandatory vaccination protocols for their employees. This has been to limit the further spread of COVID-19 among employees who engage with one another in close proximity. Where employees have refused to be vaccinated, mandatory protocols have been installed, resulting in cases coming under the scrutiny of labor arbitrators and courts. In some of these cases, the law has largely been on the side of the employers, where employees have been found culpable.20 As to whether this will withstand constitutional scrutiny, we have yet to see a test case under the ambit of constitutional law. Legal experts argue that mandatory workplace vaccination policies will most likely survive a constitutional challenge.21 Further, they argue that mandatory vaccines for COVID-19 will not infringe constitutional rights, and that even if it did, it would be found to be justifiable.²² In Brazil, the Supreme Court found that vaccine mandates are constitutional in principle, provided that they respect human rights and satisfy the reasonableness and proportionality tests.23 Ultimately, any vaccine mandate's ethical and legal soundness may be fluid and specific to the set of prevailing circumstances: the magnitude of the threat posed by the virus during a particular phase of the pandemic, the characteristics of the available vaccines, and the availability of alternative interventions.24

In the Kenyan case, Petition 329 raised the constitutional mandate of vetting individual rights against those of the general population. It considered the case of Midi Television (Pty) Ltd t/a E-TV v. Director of Public Prosecutions (Western Cape).25 The South African Supreme Court of Appeal case considered the exercise of balancing competing rights. It ruled that "where constitutional rights have the potential to be mutually limiting, in that full enjoyment of one right necessarily curtails the full enjoyment of another, a court must reconcile them." These rights should not be reconciled by weighing the value of one right against another, since all protected rights have equal value. It is not so much the values of the rights themselves that are to be weighed but rather the benefit flowing from the intrusion to be weighed against the loss that the intrusion would entail.26 A recent petition to the Kenyan High Court to suspend the government's plans to restrict unvaccinated individuals' access to governmental services was successful.27 Although the case has not yet been decided, the court order suspending the government's plan to limit access to such services demonstrates the cautious approach that courts are likely to take in determining the lawfulness of such actions.

There is a balance to be struck. "Vaccine hesitancy" is the coined term for those who wish to delay their acceptance or refusal of vaccines. A key factor in vaccine hesitancy has been mistrust

in governments, wherein some countries' officials and health care workers themselves have expressed hesitancy toward getting vaccinated.28 The second-largest contributor has been internet- and social-media-facilitated misinformation, leading to the World Health Organization calling for the "WhatsApp aunties" phenomenon to be addressed to rebuild community trust.29 The mandatory vaccination debate remains highly contested. Current approaches equate to public health protection trumping individual rights without a serious and deserved interrogation of governments' duty of care to their citizens. Indeed, more work can be done to increase access to reliable and credible information on vaccine safety and efficacy, including access for people with disabilities.

There are arguments to be made for a more sensible, human rights-based, people-centered approach. We have international human rights instruments for guidance, including the Siracusa Principles, which state that restrictions on human rights protected by the International Covenant on Civil and Political Rights must meet standards of legality, evidence-based necessity, proportionality, and gradualism.³⁰ There is no doubt that the burden of COVID-19 is immeasurable and that its impact has rearranged every facet of human life. In our haste to return to "normal," we risk alienating populations and inadvertently intensifying vaccine hesitancy. Mandatory vaccination is the most intrusive form of vaccine implementation. However, voluntary vaccination based on science and altruism faces ongoing challenges. The COVID-19 pandemic exists in an era when access to information—and, unfortunately, misinformation—is at its greatest. Pharmacovigilance, transparency around adverse events, and safety data may help build trust while uptake and acceptability among those who are vaccine "hesitant" may increase in time as more individuals around them are vaccinated. The acceptability and lawfulness of mandatory vaccination policies will likely be context specific and may further depend on the set of prevailing circumstances within each context. Given the scale of the pandemic, the enormous social, health, and economic costs associated with COVID-19, and the

availability of safe and effective vaccines, mandatory vaccination is a viable, reasonable, and ethical policy position to mitigate further pandemic-related losses.

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