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# Should COVID-19 Vaccines Be Mandatory?

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## Introduction

The accelerated development of COVID-19 vaccines is a triumph of science, and governments will soon turn their attention on ways to achieve the highest possible rates of vaccination. That requires a multi-factorial and multi-stakeholder approach, involving high vaccine confidence, robust logistics, sustainable financing, high access to healthcare facilities, equitable distribution and training health professionals, among others.

Increasing public trust and confidence in the COVID-19 vaccine requires another multi-factorial and multi-stakeholder approach, which must start well before the vaccine arrives in the health clinic. Unfortunately, these efforts are complicated by vaccine hesitancy. Vaccine hesitancy is defined as a delay in acceptance or refusal of vaccination despite availability of vaccination services,[1] and is deemed as one of the top ten health threats in the world today by the World Health Organization (WHO).[2]

Despite the severity and personal impact of the COVID-19 pandemic, the availability of a vaccine does not necessarily equate to its *de facto* acceptance and utilisation. As a measure to achieve the highest possible rates of vaccination, should governments then deploy mandatory vaccination as a public health tool?

This policy brief seeks to answer this question by focusing narrowly on mandatory vaccinations for COVID-19. It considers the vaccine hesitancy landscape during COVID-19, examines the effectiveness of mandatory vaccinations, provides arguments for and against mandatory vaccinations, and considers the ethical dilemmas for countries as they consider this option.

### 2. Vaccine Hesitancy and COVID-19

Vaccine hesitancy remains small but increasing in recent years. It can be divided into three broad groups. The first group comprises those who have genuine, reasonable and valid concerns about the importance, safety or effectiveness of vaccines, including the COVID-19 vaccine. These people will examine the speed of vaccine development, independence of regulatory agencies, and procurement criteria. The second group includes those who have deeply held ethical or religious considerations. The final group contains those likely to subscribe to more aggressive anti-vaccine viewpoints, such as conspiracy theories of collusion, debunked links to autism, or malign government interventions.

The general rise of vaccine hesitancy[3,4,5,6] is one symptom of a broader societal shift towards individualism and greater distrust of governments, experts, science and facts. It is fuelled, in part, by disinformation on social media that have prompted governments to urge social media companies to exert greater control over rumours and falsehoods.[7] Having said that, the interplay of these overarching factors is not homogeneous. They are uniquely influenced by the historical, political and socio-cultural context in which vaccination occurs.

Within this paradigm, it is also important to recognise that there is a diversity of views among those who are vaccine hesitant. Every person lies on a continuum with total trust in vaccines on one end, and its complete refusal at the other. In 2018, the Wellcome Global Monitor[8] – the largest-ever survey of global attitudes towards science and health – and Gallup found that approximately 79 per cent of the world strongly or somewhat agree that vaccines are safe; 11 per cent neither agreed nor disagreed; 7 per cent somewhat or strongly disagreed; while 3 per cent reported "don't know".

This recognition opens space for effective public health communication to convince at least the 11 per cent and 3 per cent of individuals on the importance, safety and utility of the COVID-19 vaccine, while adopting separate approaches for the remaining 7 per cent (which could include sanctions if they spread falsehoods or disinformation).

However, due to the complex multi-factorial causes of vaccine hesitancy, measures must address the 3 Cs of complacency, convenience and confidence, not just risk communications alone.[9] This includes increasing education and correcting or preventing false information on social media, all underpinned by the equitable availability and accessibility of vaccines.[10]

### 3. Are Mandatory Vaccinations Effective?

The evidence for the effectiveness of mandatory vaccinations for other vaccines is mixed. That is because mandatory vaccinations tend to happen alongside other policy measures aimed at encouraging and making it easier for people to get vaccinated. Therefore, a causal link cannot conclusively be attributed as the impact of the legislation cannot be decoupled from the potential impact of other concurrent tools, such as education and increased access. Conversely, there is also evidence that points to the ineffectiveness of mandatory vaccination and even to their potential harmful impacts on underserved communities.

There is some evidence to show that mandatory vaccination

can increase vaccine coverage. Vaccination rates in France (home to one of the highest rates of vaccine mistrust in Europe)[11] and Italy increased after mandatory vaccination laws were adopted.[12,13] However, these results may not solely be due to the respective legislations but also the concurrent information campaigns that highlighted the safety and effectiveness of vaccinations.

Conversely, there is also some evidence that mandatory vaccination does not work,[14] although this depends on the definition of success and the methodology of the study. Physical or financial access to vaccination services, or language barriers between health provider and patients are two additional factors that confound studies on the effectiveness of mandatory vaccinations.

Other reports[15] have also noted the increased risk of mandatory vaccination laws further isolating disenfranchised communities, making it more difficult to eradicate disease hotspots. Legislations that levy fines against unvaccinated people disproportionately impact poor communities, especially if they are unvaccinated due to forces outside their control, such as access issues.

When decoupled from effective public health communications, mandatory vaccinations may increase distrust in public services and the government's intentions. Although not well-studied, such a situation could lead to a broader distrust of citizenship duties and social responsibilities. As always, more research is needed in this emerging space.

It is perhaps inevitable that the evidence is not conclusive in an extremely complex field. Given the mixed evidence on the effectiveness of mandatory vaccination, we must consider the arguments for and against it in political, public health, rights, legal and economic terms.

**4. Arguments for and Against Mandatory Vaccination**

In practice, mandatory vaccination policies can use a variety of economic, behavioural and/or legal instruments. They are utilised by various levels of government ranging from central/federal to state/provincial or even district/municipal. Policies can be implemented with the legitimacy of the political process or from technocratic decisions devoid of public consensus. By necessity, mandatory vaccinations are local solutions to local problems, and as a result there is no single characteristic that unifies the various mandatory vaccination programmes and policies in place worldwide.

Proponents of mandatory vaccination justify it as a means of protecting populations. They rationalise state intervention in public health by invoking the importance of herd immunity benefits. Proponents believe that a citizen's personal freedom to choose not to be vaccinated is curtailed when it imposes burdens or harms on another citizen. Current rulings around quarantines apply the same principle where one's freedom of movement is truncated in the public interest. This can be termed the "parity argument".

Proponents also support mandatory vaccinations in economic terms. Vaccines make financial sense and are widely regarded as "public health's best buy". Given the adverse economic consequences of COVID-19, a vaccine offers the most cost-effective solution and represents good fiscal common sense. Proponents of mandatory vaccination also often borrow from the legal framework, utilising constitutional principles[16] and settled case law[17] to defend the rights of governments to impose vaccinations.

On the flipside, opponents of mandatory vaccination argue that it infringes on human rights, medical ethics and libertarianism. They also contend that such solutions are merely quick-fixes and high-visibility legislative or policy responses to obscure gaps in the government's efforts to ensure effective vaccination programmes. This politically expedient solution provides a false sense of security that there is no problem, or that it has been solved, potentially diverting political energy from the actual hard work of fixing fundamental problems surrounding vaccine hesitancy.

There could also be unintended consequences to mandatory vaccination programmes. There is a possibility of decreasing, rather than increasing, vaccination rates if the perceived harshness of mandatory vaccination laws is not softened by a persuasive campaign to communicate the need for such a law[18]. Such a mismatch, opponents point out, could be fodder for conspiracy theories that fuel public fears about vaccination and distract public discourse from constructive discussions with genuinely anxious parents. For instance, the French government' poor management of the 2009 A/H1N1 pandemic partially led to undermined confidence in the overall vaccination system and resulted in lower vaccination coverage against seasonal influenza for several years.[19]

**5. Navigating Ethical Tensions in Mandatory Vaccinations**

For COVID-19, mandatory vaccination may be a necessary tool to increase vaccination rates. However, social contracts and socio-economic, cultural, educational, religious, and political contexts vary between countries. Therefore, any decision to impose mandatory vaccinations cannot be taken lightly and must be made by the political, medical, and civil leadership at the nation-state level within their respective frameworks of democratic decision-making and accountability.

In the longer term, a basket of solutions will likely be needed to counter the continuing backdrop of societies' declining trust in governments, institutions and facts as reported by the Pew Research Centre.[20] Top-down impositions of vaccinations can be seen as a failure of governments to adequately communicate, educate, convince, or persuade their citizens about the safety and effectiveness of vaccines. More broadly, it can also be a failure to inspire trust in institutions of health and to inspire civic responsibilities and public-spiritedness.

Mandatory vaccination programmes, in of itself, cannot be the first, the only, or even the main solution to increase vaccination rates. In addition, they must not replace or distract from parallel work in improving health systems and effective public health communication. Equally, these programmes must not be sold to the public as a magic solution to the communicable diseases or vaccine hesitancy problem.

In general terms, supranational organizations like the WHO

and the Global Vaccine Alliance (GAVI) are careful not to endorse, promote or otherwise take a stance on mandatory programmes. Much of the rhetoric centres around non-coercive and less stringent policies to increase vaccination rates. This goes to show that much of the burden of decision-making for which tool to use still lies within sovereign nation-states.

Sovereign nation-states must navigate the tensions between individual liberties and the public interest. There are three main tensions. Chief among these tensions is the delicate balance between the human rights of the individual and the public health rights of the collective. Scholars have long analysed the dynamics between individual human rights and the rights of the collective.[21] This balance exists somewhere on a spectrum between total individual liberty and total submission to society, with frequent movements along the spectrum as societies, norms and value systems change.

Tarantola and colleagues have previously proposed a Health, Development and Human Rights Impact Assessment (HDHR-IA)[22] utilizing a rights-based approach which could be adapted in the decision-making for mandatory vaccination programmes. A related point is the human right to health, which could be interpreted correctly in either of two ways: (1) the right to decide for one's health, or (2) the duty for well-informed states to intervene for public health purposes because humans make irrational decisions.

A second inherent tension is between the duty of a government to preserve its citizens freedom of choice and to protect its citizens from harm. In such decisions, governments must first demonstrate and then communicate the harm principle in justifying mandatory vaccinations. Then they must consider if they have the legitimacy to impose mandatory vaccinations. There are three traditional sources of legitimacy: consent *("consent of those governed is a necessary condition for the legitimacy of political authority")*[23]; beneficial consequences (*"governments decide what is best for their subjects and present them with binding conclusions that they are bound to follow"*)[24]; or public reason *("if all citizens, as reasonable and rational, can endorse in the light of their common human reason")*[25].

Governments must visibly pass any of these three tests in order to claim legitimacy to deprive its citizens of freedoms. One can argue the urgency and significant population harm of COVID-19 meets these necessary requirements. However, in practical terms, the inter-dependence between national, state and city governments must also consider issues of which entity has more legitimacy. This is before we even begin discussing the role of power in decisions on mandatory vaccinations: who has power, how can they exercise it, and are they accountable?

The third and final tension lies within the individual citizen. They have understandable desires to assert the fullest range of their rights and freedoms but are understandably curtailed by their duties and obligations in a society. Uneasy is the individual who must simultaneously play the role of rights-holder and duty-bearer. Even Article 29 in the Universal Declaration of Human Rights[26] – the source document that reinforces the rights of all human beings – simultaneously declares that "Everyone has duties to the community" and "...everyone shall be subject only to such limitations as are determined by law (to) meet the just requirements of general welfare in a democratic society".

If we trust the wisdom of the crowds, then mandatory vaccination programmes will never be necessary, even in the context of COVID-19. Given the bounded rationality[27] of human beings however, enlightened and accountable governments could make a reasonable case for stepping in with programmes to encourage better decisions by its citizens. Such paternalistic behaviour already exists with non-intrusive health labelling on food and increasingly with more intrusive behavioural nudges such as risk-matching insurance premiums according to a policy-holder's levels of physical exercise as tracked by wearable devices.[28] Mandatory vaccination programmes are merely the logical extrapolation of the tools of a responsible government in ensuring that citizens meet their duties while enjoying their rights.

Given the existence of current government interventions towards reducing individual and population harm, COVID-19 mandatory vaccinations could be justified as a mere necessary extension of these strategies. If this proposition is accepted, then the question becomes how a state will execute mandatory COVID-19 vaccinations. This query is key as it essentially points to the degree or nature of the state's intrusion onto personal freedoms and may influence considerations on its justifiability.

Indeed, perhaps mandatory vaccinations may be a nuclear option that may never need to be exercised in in curtailing this pandemic, as there are several policy levers between "soft" education and "hard" laws. For example, financial incentives and disincentives for vaccination exist. Payments to parents who have their children vaccinated in conditional cash transfer ("CCT") programmes have been shown to increase vaccination rates when coupled with education.[29,30,31,32] CCTs have been shown to also increase vaccination rates in adults.[33] The COVID-19 vaccine can be "recommended" or "encouraged", and leaders, celebrities and influencers can shape public opinion by being publicly vaccinated.

States must also consider their stance and criteria for personal or collective exemptions if the COVID-19 vaccination is to be made mandatory. Many existing vaccination policies allow exemptions on medical grounds, and some on the grounds of religious beliefs[34] or for personal or moral beliefs.[35] Recently some of these criteria have been modified or removed even for individuals such as conscientious objectors, including on religious grounds.[36,37] Other governments have negotiated with religious institutions to remove their religious objections to vaccination, and then passed a law with the support of that institution.[38]

These tensions are challenging enough to manage by themselves but are more challenging in combination. A government can navigate these tensions by building thoughtful and inclusive consensus and coalitions. There is an equally crucial role for effective communication strategies for every part of the vaccination campaign, especially if a mandatory vaccination programmes is deemed necessary.

## 6. Conclusion

Mandatory vaccination is useful public health tool especially given the current pandemic context. However, it is not a silver bullet and should not be viewed as such. State decisions regarding COVID-19 vaccination strategies must be made within the policy's specific context. This is particularly important given the pandemic's rapidly evolving and novel nature.

Vaccine hesitancy is a real threat, but it ranges from reasonable fears of safety to absurd claims of government conspiracies. This phenomenon should not be viewed from a reductionist point of view but scrutinized for the heterogeneity that it is. Mandatory vaccination is a nuclear option that should only be deployed if all other measures have failed, and not the first policy instrument that governments reach for.

## Endnotes


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