

Proportionality and evidence-based pandemic management

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A key ethical and human rights challenge of pandemic management is to effectively protect public health while restricting individual freedom as little as possible. The difficulty in meeting this challenge has been illustrated by the controversies surrounding key measures adopted in response to the COVID-19 pandemic, such as curfews, travel bans, school closures, vaccine mandates, vaccine prioritization, and restrictions of access to hospitals and nursing homes (see, e.g., [1–6]). In the words of Dr Tedros Adhanom Ghebreyesus, the Director General of the World Health Organization (WHO): “*All countries must strike a fine balance between protecting health, minimizing economic and social disruption, and respecting human rights.*” [7]

Proportionality in pandemic management

Ensuring proportionality is a prerequisite for the justification of pandemic response measures in democratic societies and at the same time a complex challenge for policymakers, courts, lawyers, ethicists and civil society.

As an ethical principle, proportionality requires that restrictions to individual rights and freedoms should be adopted only to the extent to which they are necessary and effective in promoting a public health policy goal. Furthermore, policymakers should weigh the public health benefits expected from a policy measure against the restrictions to individual rights and freedoms it entails, and should consider all available, less intrusive courses of action. As an example, contact tracing apps should be limited to the temporary use of data collection, performed only for clearly defined purposes necessary for pandemic management [5].

In addition to functioning as an ethical principle, proportionality also has an important procedural dimension. Restrictions to individual freedoms and rights should be assessed not only when they are adopted, but throughout the entire process of their implementation. If problems or unexpected side-effects occur, public health policy measures need to be reconsidered and eventually adapted. Particularly wide-reaching measures should be subject to continuous review to ensure they can be adapted or abolished if they become disproportionate. For instance, restrictions to free movement should only be imposed as a last resort, tailored to specific risks and terminated if they reveal themselves to be ineffective [6]. Policymakers should avoid blanket

policies and give due consideration to the impact of public health measures on different population subgroups, and in particular disadvantaged groups [8].

Proportionality is a fundamental safeguard of democracy during a public health crisis. Pandemic management, which may in a state of emergency require wide-reaching restrictions of individual freedoms and rights, is a key task of the executive branch of government. Already at the beginning of the COVID-19 pandemic, the United Nations warned in April 2020 about signs that pandemic management would be abused to undermine the rule of law and impose wide-reaching, permanent restrictions on human rights beyond what is necessary to tackle the pandemic [9]. There is, in fact, ample evidence of authoritarian governments abusing pandemic response measures to undermine or attempt to undermine the rule of law and civil and political rights. For instance, Hungary and Cambodia have used the pretext of pandemic management to pass new laws criminalizing ‘fake news’, and Jordan, Morocco, Yemen and Vietnam have used it to crack down on social media [10]. In March 2020, the Hungarian Parliament passed a law (which still exists) giving the Hungarian government the right to set aside any law by decree in a ‘state of danger’ (which was declared by the Hungarian government between March and June 2020) [11]. Many authoritarian governments, for example, those of Turkey and Russia, have implemented pandemic response measures as a pretext for targeting anti-government journalists and public protests [12]. Overall, 2020 and 2021 were devastating years for democracy worldwide, with the Economist Intelligence Unit (EIU) Democracy Index falling to its lowest level in 2021 since its inception in 2006, and even lower in 2022 [13, 14]. Proportionality, which balances the imperatives of protecting human rights and preventing disease and loss of lives from pandemic diseases, is an important mechanism of controlling and limiting government power, and thus essential to protecting democratic institutions in a public health crisis. In the words of Marija Pečjinović Burić, the Secretary General of the Council of Europe: “*While the virus is resulting in the tragic loss of life, we must nonetheless prevent it from destroying our way of life – our understanding of who we are, what we value, and the rights to which every European is entitled*” [15].

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Proportionality and evidence-based policy-making in a pandemic

Proportionality requires that restrictions of individual freedoms and rights are based on the best available evidence [16]. Measures which significantly restrict individual freedoms must be continuously reassessed on the basis of up-to-date scientific evidence and new findings on the impact and effectiveness of these measures. Good public health policy requires a strong connection between the scientific community and policymakers.

Pandemic management, however, presents several challenges in this regard. First, pandemic response measures are generally taken in a situation of emergency, uncertainty and rapidly changing parameters, in which sufficient scientific evidence is often unavailable [17]. In cases of serious threats to public health, there can be an ethical imperative to act even if sufficient empirical evidence has not yet been amassed [18]. Second, pandemic management needs to target a broad range of future scenarios, not only those which are most likely to occur according to the current scientific data. Third, empirical studies are regularly subject to methodological limitations, uncertainty, discussion and contestations, which means that the evidence basis for policymaking is often disputed among researchers themselves.

Nevertheless, evidence-based decision-making is a key component of good pandemic management. On the one hand, it can contribute significantly to increasing the acceptance of and compliance with the wide-reaching limitations of individual rights which pandemic management often entails. On the other hand, it is also an important tool to limit government discretion and increase government accountability in pandemic management. In this sense, evidence-based pandemic management is a key requirement for the proportionality of pandemic response measures.

Evidence-based pandemic management raises several important ethical and legal issues:

- How can institutional frameworks for pandemic management be designed to ensure that pandemic response measures are taken on the basis of the best available scientific evidence? Which monitoring mechanisms for pandemic management should be put in place, and which competencies should they exhibit?
- To what extent are policy decisions that lack scientific evidence and expert advice ethically justifiable? To what extent are large-scale restrictions of individual freedoms justifiable by virtue of the precautionary principle, which states that in the event of a possible serious threat to public health, restrictions not based on an abundance of scientific evidence can nevertheless be imposed?
- How can evidence-based pandemic management best be integrated into the democratic policymaking process?

These issues need to be addressed and discussed by scholars, lawmakers and the public in order to strengthen pandemic resilience at the local, national, regional and international levels.

Invitation to webinar

Webinar: "Proportionality and Evidence-Based Policymaking in Public Health: The Case of COVID-19 Vaccine Mandates"

Thursday 30th June from 2.30 pm to 4.00 pm (Zurich time). To register click [here](#).

This event is part of the Forum for Global Health Ethics Webinar Series and is organised by the Institute of Biomedical Ethics and History of Medicine at the University of Zurich and the Swiss Medical Weekly. Our speakers will present their views on COVID-19 vaccine mandates, discuss the issues of proportionality and evidence-based policymaking, and answer questions from the audience.

Speakers:

- [Natasha Anwar](#) – Pathologist and Researcher, Aga Khan University Hospital, Pakistan
- [Julian März](#) – Bioethics Researcher, University of Zurich, Switzerland
- [Fruzsina Molnár-Gábor](#) – Law Professor, Heidelberg University, Germany
- [Ross Upshur](#) – Professor and Head of Public Health Division, University of Toronto, Canada

Hosts:

- [Nikola Biller-Andorno](#) – Director, Institute of Biomedical Ethics and History of Medicine, University of Zurich, Switzerland
- [Tania Manriquez Roa](#) – Coordinator, Forum for Global Health Ethics, University of Zurich, Switzerland

The webinar will explore, in particular, the following questions:

- (1) Are COVID-19 vaccine mandates a viable pandemic management measure, considering uncertainties about the future development of the pandemic and the effectiveness of existing vaccines against future COVID-19 variants?
- (2) Which empirical basis should be required for the introduction of COVID-19 vaccine mandates, and how should uncertainties regarding the effect of mandates on vaccine uptake and the future development of the pandemic be addressed?
- (3) Which institutional framework should be established to ensure that decisions on vaccine mandates are taken on the basis of the best available scientific evidence?

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