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PREPARING FOR THE NEXT PANDEMIC

By Allen Buchanan*

Abstract: *My aim in this essay is to argue for a better moral-conceptual framework and for institutional innovation in preparation for the next pandemic. My main conclusions are as follows. (1) The primary moral principle that should guide responses to the next pandemic is the duty to prevent and mitigate serious harms. (2) A proper understanding of the moral foundations and scope of the duty to prevent and mitigate serious harms requires rejecting both Extreme Nationalism and Extreme Cosmopolitanism. (3) A better response to the next pandemic requires transforming the moral landscape through institutional innovation by developing an international institution that can perfect indeterminate duties (i) by identifying duty-bearers, (ii) by specifying their duties to provide medical resources and other forms of aid, (iii) by allocating the specified duties to various public and private entities in such a way as to ensure effective coordination and that the costs of providing aid are fairly distributed, and (iv) by providing effective mechanisms for compliance with the specified duties. (4) Institutional innovation is morally required, regardless of whether the harm prevention and mitigation duties of the better-off are duties of justice or of beneficence, because without institutionalization, some duties of justice, including those requiring the prevention and mitigation of serious harms, suffer some of the same indeterminacies that are present in duties of beneficence.*

KEY WORDS: accountability, cosmopolitanism, nationalism, institutional innovation, perfecting imperfect duties

I. Introduction

This essay makes the case that due preparation for the next pandemic should include significant institutional innovations at the national and international levels and identifies the key agents who should make these changes. My main conclusions are:

(1) A better response to the next pandemic requires two major institutional changes. The first is the construction of a treaty-based international institution that can "perfect" indeterminate duties on the part of wealthy countries to prevent and mitigate serious harms to people in poor countries by

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(a) identifying duty-bearers,
(b) specifying their duties to provide medical resources and other forms of aid,
(c) allocating the specified duties to various public and private entities in such a way as to ensure effective coordination and that the costs of providing aid are fairly distributed, and
(d) providing effective mechanisms for compliance with the specified duties.
(e) Without such institutional innovation, it is all but certain that efforts to aid those in poorer countries will be inadequate. Better-off countries and relevant nongovernmental organizations (NGOs) should take the lead here, but they should solicit participation by less wealthy countries.

(2) This first institutional innovation is morally required, regardless of whether the harm prevention and mitigation duties of the better-off are duties of justice or of beneficence, because without institutionalization, some duties of justice, including those requiring the prevention and mitigation of serious harms to distant strangers, suffer some of the same indeterminacies that are present in duties of beneficence. In both cases, indeterminacy predictably results in moral underperformance.

(3) The second needed institutional change is at the domestic (country) level. Government officials should be legally required to provide public justifications for the pandemic policies they opt for. Justifications should include the results of cost-benefit analyses that are publicly accessible. Legislators should enact laws requiring officials to respond publicly on the merits to dissenting views offered by qualified parties as the latter are identified by an independent third party. In addition, there should be impartial, publicized ex post evaluation of policies, with accountability for culpable errors, where accountability means that meaningful costs will be imposed on officials who are judged to have acted wrongly. Finally, when officials declare a state of emergency or employ emergency discourse, they should be legally required to provide a public justification for doing so, required to specify whether the emergency is truly national or only an emergency with respect to certain regions or subpopulations, and periodically to justify the continuation of the emergency status over time. Ex post accountability evaluation should include scrutiny of official recourse to the declaration of an emergency.

(4) Public health messaging generally, including communications regarding pandemic policies, should make clear the limits of scientific expertise and frankly acknowledge that important policy choices typically rely on controversial moral assumptions. Public health and other government officials should explain to the public that policy choices are conclusions of arguments that contain not

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> only actual premises based on scientific knowledge but also normative premises about appropriate trade-offs when values conflict. They should also acknowledge that scientific experts differ on the facts and that scientific judgments and the policy decisions based in part on them are subject to ongoing revision. Officials should be held personally accountable for fostering the illusion that good policy is simply a matter of scientific expertise or for exaggerating consensus in the scientific community. In different contexts, different accountability arrangements may be appropriate—from official, public reprimands to canceling the retirement benefits of culpable officials to civil suits.

To create the legal duties proposed in these recommendations, legislators will have to act. Organized public pressure from a wide range of civil society groups may be needed to ensure that they do so. Instituting these measures would not only improve the quality of policy decision-making. Just as important, doing so would do much to remove what may be the single greatest obstacle to an effective response to the next pandemic: the legitimacy deficit, the public's lack of confidence in the institutional exercise of power.

The COVID-19 pandemic was not just a health crisis; it was a crisis of information. More specifically, efforts to deal with the pandemic have been hampered by doubts about who has the relevant expertise. Adopting the domestic institutional changes that I recommend would mitigate this problem. If officials are required to give public justifications for their policies and to respond to dissenting voices, the public will be in a better position to judge whether their claims to expertise are justified.

II. The Duty to Prevent and Mitigate Serious Harms: An Initial Clarification

Before considering the institutional changes needed to prepare for the next pandemic, it is necessary to get our moral bearings. The single most important substantive moral principle that should guide pandemic response is the duty to prevent and mitigate serious harms to innocent persons. The duty to prevent serious harms, as opposed to mitigating them once they have already occurred, bifurcates into two distinct duties. Where the harm to be averted is imminent, we may speak of the duty of rescue or preemption; where it is not imminent, of the duty of prevention properly speaking. In the case of a pandemic, both the duty of rescue or preemption and the duty of prevention are applicable. When there is no need to distinguish them, I will use the term "prevention" to cover both efforts to avert imminent and more temporally distant harms.

Consider first the duty to avert imminent serious harm: the duty of rescue. Philosophers usually discuss the duty to rescue by focusing on a highly

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simplified case. You see a child drowning in a shallow pond.[1] You alone can save the child and you can do so without excessive cost to yourself. Moral theorists who differ on other matters tend to agree that you have a duty to save the child and that it is a duty of justice, that she has a right to your aid and will be wronged by you if you fail to provide it.

We should first distinguish, though, between duties of beneficence and duties of justice. Duties of justice are generally said to be perfect duties, which means they have three features. First, they are directed duties. In the case under consideration, they are owed to the particular person in need of rescue; if one fails to fulfill the duty, one wrongs that person. Second, they impose determinate requirements, that is, the particular actions or omission that fulfill the duties are specified. The paradigm case of a duty of justice, as a perfect duty, is the duty to perform what one has promised to do. The duty is directed, in that it is owed to the person to whom you made the promise. It is determinate, because one must perform the particular act one promised to perform. Third, duties of justice are said to be enforceable.

Duties of beneficence, in contrast, are said to be imperfect duties in that they lack both directedness and determinacy as to what they require of the duty-bearer. They are not owed to any particular person in need and the duty-bearer has discretion as to whom she helps, what form of aid she provides, and when she provides it. In addition, these duties are generally held to be unenforceable.

In Section III, I will explain why duties of beneficence, because of their indeterminacy of content and nondirectedness, are prone to moral underperformance. Then I will argue that, contrary to the received view, some duties of justice—including the duty to prevent serious harms to distant strangers—are also indeterminate as to what they require of the duty-bearer and that this indeterminacy, unless reduced through recourse to institutions, also predictably leads to moral failures. I will show that the moral imperative for institutional innovation obtains regardless of whether the duty to prevent and mitigate serious harms is a duty of justice or of beneficence.

III. The Imperfections of Imperfect Duties

A. Why imperfect duties foster moral underperformance

Imagine a world in which there are only duties of beneficence to prevent and mitigate serious harms to distant strangers. In such a world, would those in poor countries be able to rely on adequate aid from wealthy countries in the advent of a pandemic? The answer is clearly "no." That is because imperfect duties include features that predictably lead to moral underperformance.

[1] See, e.g., Peter Singer, "Famine, Affluence, and Morality," *Philosophy & Public Affairs* 1, no. 3 (1972): 229–43.

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First, imperfect duties are tailor-made for procrastination and weakness of the will. One isn't required to do some particular thing for some particular individual or group at a particular time. Hence, one can always rationalize one's not doing anything by saying, "I'll do something, for someone, later."

Second, because they allow the duty-bearer discretion as to which individuals or groups to aid, imperfect duties can facilitate the expression of racial, religious, or ethnic biases. Even when the discretion that imperfect duties allow does not result in such biases, it permits the duty-bearer to choose to help only those in much less need than others. Indeed, this discretion frees the duty-bearer from the requirement of even attempting to employ any rational or morally acceptable criterion for how to ration her aid.

Third, as different agents exercise their discretion as to whom to help, how to help them, and when to help them, the result will be discoordination. And that, in turn, will mean gaps and redundancies in the provision of aid. In the world of exclusively imperfect duties, there will be no invisible or visible hand to ensure efficiency in the provision of harm-prevention.

Fourth, the indeterminacy of imperfect duties makes accountability for their fulfillment difficult if not impossible. The lack of accountability due to the indeterminacy of imperfect duties is an obstacle not only to their enforcement, but also to any other effective measures for compliance. If a duty is indeterminate as to content or as to who the duty-bearer is, there is no way of formulating a suitable standard for performance, and hence no way of holding agents responsible for failing to meet that standard.

The world I have just described is our world. From the beginning of the COVID-19 pandemic, wealthy countries and pharmaceutical companies publicly acknowledged that they should do something to provide aid to poorer countries to ensure access to vaccines and other medical supplies. But neither they nor anyone else was willing or able to specify what exactly they should do, to characterize the nature and extent of their responsibilities. The predictable result was undersupply and discoordination of aid, and, more importantly, no possibility of any reasonable measures for holding these entities accountable. One cannot hold someone accountable for doing something unless you know what it is they are supposed to do.

B. Improving the moral status quo

Suppose that you are a morally conscientious inhabitant of this world of only imperfect duties and that you are fully aware that imperfect duties are prone to moral underperformance. In the case of the imperfect duties of wealthy countries to prevent and mitigate pandemic-caused serious harms to people in poorer countries, you can be assured that efforts will be inadequate.

Given your awareness of this morally deficient situation, what is your proper response? My answer is that you should recognize that you have a duty to cooperate with others to transform the situation so as to make the

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commitment to preventing and mitigating serious harms reasonably effective. That is, you have a duty to cooperate to perfect the imperfect duty of beneficence for so far as it applies to a pandemic. More precisely, you have a duty to work with others to create institutions that will perfect imperfect duties to prevent and mitigate serious harms resulting from a pandemic, because the only feasible way to perfect imperfect duties is by institutionalizing them.

IV. Perfecting Imperfect Duties through Institutions

How can institutions perfect an imperfect duty? They can identify specific duty-bearers and right-holders in such a way as to distribute fairly the costs of preventing and mitigating harms to large numbers of people. They can also include mechanisms for compliance with the duties they specify, either through the threat of penalties for noncompliance, rewards for compliance, or some combination of these. Effective measures for compliance can prevent both the free-rider and assurance problems from stymying concerted efforts to provide aid. If the institution functions properly, the result will be significant and coordinated aid.

The use of institutions to perfect imperfect duties is not a mere possibility; it actually occurs. The modern welfare state is a prime example of an institution that improves our moral situation by perfecting imperfect duties. It transforms the moral landscape by moving from a situation in which the welfare of the most vulnerable members of society depends on the beneficence of individuals and groups to one in which those in need have enforceable, determinate claims of justice, grounded in legal entitlements.

If we have good moral reasons to prevent and mitigate serious harms, then we ought to ensure that we are reasonably effective in doing so. We should not accept a situation in which aid will not be forthcoming, will be inadequate, or will be so seriously uncoordinated that some aid is wasted by being redundant and some people in need will not receive it.

If those in wealthy countries can help construct institutions that will greatly increase the efficacy of our efforts to avert serious pandemic-caused harms to people in poor countries and we can so without excessive costs to ourselves, we ought to do so. Moral consistency—indeed, basic integrity—requires that we do this. The same moral commitment that grounds imperfect duties to preempt or prevent serious harms—namely, concern for the well-being of all persons—requires us to perfect those duties.

V. The Moral Necessity of Institutionalizing Duties of Justice, Not Just Duties of Beneficence

My strategy has been to begin to make the case for institutional innovation in preparation for the next pandemic by starting with an uncontroversial premise: there is a duty of beneficence to prevent and mitigate serious

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harms to distant strangers. I will now show that the need for institutional innovation also applies if one assumes there is a duty of justice to prevent and mitigate serious harms to distant strangers.

This conclusion will seem counterintuitive if one assumes that all duties of justice are perfect duties, where this means that they are all *both* undirected *and* determinate in content, that is, specific with respect to what is required of the duty-bearer. But that assumption, I will show, is unwarranted. Some duties of justice, including the duty of wealthy countries to prevent and mitigate serious harms to persons in poor countries, have one of the two features that are said to characterize imperfect duties, namely, indeterminacy of content. The more general point is that some duties of justice are unlike the duty to fulfill a promise, which is perfect in both respects, that is, directed and determinate in content.

A. Half-perfect duties: Directed, but indeterminate in content, absent institutional specification

In the case of the duty to prevent and mitigate serious harms due to a pandemic, there are several sources of indeterminacy as to exactly what is required of the duty-bearers. First, the duty by itself sets no priorities, yet even the resources of wealthy countries are limited and may not allow for helping all of those in peril. One needs to know whom to help first and who should get the most aid. Second, although whatever actions are to be taken to avert serious harms to those in poor countries may be constrained by some degree of partiality toward co-nationals, there is much honest disagreement as to when partiality is excessive and when it is not. Third, the duty to prevent and mitigate serious harms is presumably subject to a "no excessive cost" proviso, but what counts as an excessive cost may depend in part on what cost others are bearing. For example, one country bearing disproportionately greater costs because others were not acting appropriately might be either unfair in itself or might put the more generous country at a competitive disadvantage vis-à-vis those bearing lesser costs. In the absence of institutions to distribute costs fairly, duty-bearers may not be able to determine what counts as excessive costs; until they know that, they will not know what exactly is required of them. Finally, without an institution to coordinate efforts on the basis of the best information available, even conscientious government officials may not know how to provide aid in a reasonably effective and efficient manner. The provision of aid, if it occurs, may include gaps and redundancies.

So, even if duties of justice are unlike imperfect duties of beneficence in that they are directed, they can in some cases share the other feature of imperfect duties: indeterminacy of content. One can know that one ought, as a matter of justice, help prevent and mitigate serious harms to distant strangers, but not know exactly how to proceed in order to fulfill the duty in a reasonable and responsible manner.

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In other words, some duties of justice are what might be called "half-perfect" duties; they have one of the features of perfect duties, namely, directedness, but lack the other, namely, determinateness of content. A prime example is the duty to respect the property of others. That duty is owed to the property owner, but, in the absence of legal institutions to specify the content of the duty, it is indeterminate. Property rights are bundles of claim-rights, permissions, and immunities, and there may be no one bundle that is uniquely appropriate in all contexts, given the justification for and function of property rights. Institutions can provide principled but to some extent conventional specifications of the ingredients of the bundle that constitutes property rights.

My claim is that the same is true of duties to prevent and mitigate serious harms to distant strangers. Because they are not fully perfect—they are indeterminate as to content, though directed—they require institutional specification, just as fully imperfect duties do.

This indeterminacy of content in the case of the duty to prevent serious harms, even when it is considered to be a duty of justice, facilitates the moral underperformance we encountered above, in the world in which only duties of beneficence existed. Indeterminacy encourages weakness of the will, back-sliding, bias in the provision of aid, and inefficient discoordination. To rest content with these deficiencies when they can be reduced or eliminated is itself a moral failure.

B. Is the duty to create institutions to make duties determinate itself a duty of justice or of beneficence?

An important question remains. What is the status of the duty to work together to create the needed institutions: Is it a duty of justice or is it a duty of beneficence or charity or humanity? If we fail to work together to construct the needed institutions, do we wrong those who will perish because we failed to do so?

Here, John Rawls's notion of a natural duty of justice is helpful.[2] His highly plausible claim is that, out of recognition of the basic moral equality of all persons—that is, to show proper respect and concern for all—we ought to cooperate to create conditions in which all will enjoy the benefits of justice. This is not a new idea. Immanuel Kant thought there is a fundamental duty to create conditions in which we can relate to others in a just way.[3]

It is a commonplace that justice means giving each person her due. Following Kant and Rawls, my suggestion is that giving each person her due means, inter alia, cooperating to establish conditions in which there are

[2] John Rawls, *A Theory of Justice: Revised Edition* (Harvard, MA: Belknap Press, 1999), 98–101.
[3] Immanuel Kant, *The Metaphysics of Morals*, trans. Mary Gregor (New York: Cambridge University Press, 1991), 35–122.

clear duties of justice, if doing that is necessary to prevent them from suffering serious harms from a pandemic. In other words, I think the duty to work together to create institutions that makes indeterminate duties workably determinate is a duty of justice.

At this point someone might object that the duty to construct institutions to perfect duties is itself so indeterminate that it cannot qualify as a duty of justice. That objection, however, uncritically assumes what I have already given reason to reject, namely, the stipulation that duties of justice, as perfect duties, are not only directed, but also determinate in content. The question is whether the duty to cooperate to create the needed institutions is determinate enough to produce results, assuming it is taken seriously.

Under current conditions, the duty is not so indeterminate. We know that there will be another pandemic and that we cannot be confident that it will only occur in the remote future. We also have institutional resources, such as the law of treaty-making and relevant international organizations, that can be used to construct new institutional arrangements to do the job. We also have legislatures that are authorized to create legal obligations on the part of officials, in order to make them more accountable. It is also clear that an institutional solution will require the support of certain specific groups and organizations, especially states, pharmaceutical and medical supply companies, and health and human rights organizations. Consequently, there is something determinate that a number of identifiable parties ought to do *now*, namely, begin the process of building institutions to create a fair distribution of effectively incentivized, directed duties to ensure that those most endangered by the next global health crisis receive relief. Because it is unclear how long it will take to build the needed institutions, it is imperative to start now.

But perhaps that is too fast. There are considerable obstacles to achieving the collective action needed to develop new institutions or significantly modify old ones so as to create perfect duties for a better response to the next pandemic. And there are many ways one might go about the task.

Nevertheless, even if the duty to create institutions to perfect indeterminate duties to prevent and mitigate serious harms to distant strangers is *presently* unhelpfully indeterminate, that can and should change. If some group of moral philosophers, policymakers, or an international organization such as the World Health Organization (WHO) were to propose an outline of what such an institution would look like and it gained sufficient support, that could make the duty to engage in institutional innovation more determinate by serving as a moral coordination point on which to focus the efforts of individuals and organizations. If this occurs, then it will become clear that there are definite steps that need to be taken to perfect the imperfect duties.

My analysis therefore has a clear practical implication. The first step toward proper institutionalization of the duty to avert serious harms

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attendant on the next pandemic is to produce an effective moral coordination point in the form of a reasonably concrete proposal for what the institution should look like and how it should be created. In what follows I begin the task of formulating such a proposal.

VI. Designing the Needed International Institution

A. Creation or modification?

The threshold question is obvious: Should it be a new institution or a modification of an existing one? There are three candidates for modification: the World Health Organization (WHO), the Vaccination Alliance (GAVI), and COVID-19 Vaccines Global Access (COVAX).[4] In my judgment, each is sufficiently problematic that building on it would be inadvisable.

The WHO has suffered a loss of sociological legitimacy that will make it difficult for it to take on the more ambitious mission of perfecting imperfect duties of rescue in a pandemic. In particular, it has proved unable to stand up to China, by failing to demand timely information concerning the origins and early spread of COVID-19 and tissue samples. More generally, WHO appears to be unable to act effectively in the face of political pressure from member states. It has also been unable or unwilling to work well with pharmaceutical companies.

GAVI has operated with a patently defective rationing system that ignores differences in need among vaccine recipient countries. In addition, its policies are unduly influenced by the preferences of one major donor: the Gates Foundation.

COVAX has failed miserably in attaining its vaccine distribution goal: only 5 percent of the projected 2 billion doses. What distribution it has achieved has been grossly inequitable, with 90 percent going to the richest G20 countries. In addition, there have been justifiable complaints of lack of transparency.

I do not pretend to have provided a full critical review of these institutions. I hope to have said enough to make initially plausible the suggestion that a new institution is needed. What follows is a set of necessary, but not sufficient, conditions that the needed institution should satisfy.

B. Key moral desiderata

First, there should be principles and mechanisms for the distribution of vaccines and other medical supplies needed in a pandemic to poorer

[4] See, e.g., COVAX, "No One Is Safe Until Everyone Is Safe," https://www.who.int/initiatives/act-accelerator/covax; World Health Organization, "Preparing for Pandemics," https://www.who.int/westernpacific/activities/preparing-for-pandemics; GAVI, the Vaccine Alliance, "To Prevent the Next Pandemic, Follow the Science," https://www.gavi.org/vaccineswork/prevent-next-pandemic-follow-science.

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countries,[5] compatible with fair rationing of these resources within countries. Second, the institution should at least approximate a fair distribution of the costs of providing aid, in part by a progressive schedule of contributions, with richer countries paying more. Third, the institution should be structured in such a way as to guarantee meaningful participation by the beneficiaries of aid, especially with regard to measures for accountability. Fourth, there should be provisions for ensuring that aid is used effectively. This is no minor task, given that some poorer countries have corrupt and/or inefficient governments or may lack the infrastructure to use donated medical supplies properly and effectively.

C. Structural-procedural desiderata

(1) The design of the institution should exemplify incentive compatibility with regard to joining, continued participation, and general institutional functioning.
(2) The institution should be designed and presented to publics in such a way as to achieve sociological legitimacy, that is, a widespread consensus that the institution has the authority to do what it is supposed to do and is worthy of the public's trust. Sociological legitimacy is generally necessary if an institution is to function effectively, without undue recourse to coercion.
(3) The more important operations of the institution should be reasonably transparent, where this means, inter alia, that the institution should facilitate access to its operations on the part of credible external epistemic communities (such as NGOs), both for purposes of achieving sociological legitimacy and for effective accountability mechanisms.
(4) The institution should be engineered for adaptability in the face of changing challenges over time.
(5) There should be a clear delineation of the terms of accountability, including
    (i) a specification of the key criteria for evaluating institutional performance,
    (ii) identification of the primary accountability-holders (those who are tasked with applying the criteria for evaluation), and
    (iii) measures to impose costs on relevant institutional agents in the event of a negative evaluation by the primary accountability-holders.
(6) Eligibility to receive aid should take into account the capacity and willingness of potential recipients to use aid effectively.

[5] The idea that it is rich countries that should be assigned duties by the international institution is a simplification. Some nonrich countries, including India and Israel, have significant capacity to produce vaccines. Capacity, not just relative wealth, should count in determining the distribution of duties.

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D. Formal or informal?

The institution should be treaty-based for three reasons. First, legally binding commitments are, other things being equal, more effective in preventing free-rider and assurance problems and preventing shirking. Second, international treaty law provides procedures for creating institutions that help them achieve sociological legitimacy, which is important for effectiveness. Third, legal obligations provide clear, public moral coordination points for mobilizing public pressure on governments and pharmaceutical companies.

VII. How Misuse of the Emergency Framing Hinders Fulfillment of the Duty to Prevent Harm

Proper institutionalization of the duty of wealthy countries to prevent serious pandemic-caused harms to people in poorer countries will require determining, at least in broad outline, how much costs wealthy countries should be expected to bear. I will tackle this task indirectly, by explaining how misuse of the term "emergency"—and especially of "national emergency"—distorts efforts to determine the scope of the duties that the institution would specify and distribute. In doing so, I will also show that the problem of what costs wealthy countries should bear to avert serious harms in poorer countries is only one of two "excessive cost" problems that must addressed. The other is: How much costs should the majority of the citizens of a wealthy country who are not at serious risk in a pandemic bear for the sake of averting harm to a minority of their fellow citizens who are at high risk?

During the COVID-19 pandemic, attention was focused largely on the ethics of rationing vaccines and other medical resources across countries and, more specifically, on the question of what duties wealthy countries have toward poor ones. Intracountry rationing was addressed, but there has been little or no attention paid to the question of what burdens people at low risk should bear to protect their fellow citizens who are at high risk.

The two questions are connected. If a wealthy country refuses to acknowledge that there are limits on what the majority at low risk owe to the minority of their fellow citizens at high risk and instead allocates resources as if all citizens were equally in peril, it may be all the more unlikely to provide adequate aid to poor countries. The resources or the political will to allocate them to distant strangers may be lacking. More specifically, the economic damage of draconian lockdown policies and the cost of massive vaccination programs requiring multiple vaccinations and boosters may make the public unwilling to make further economic sacrifices for the sake of distant strangers.

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A. What the emergency framing obscures

The belief that there is an emergency functions like a narrowly focused intense beam of light, illuminating a small field of vision while casting everything else into utter darkness. In other words, framing a situation as an emergency not only highlights certain risks, but it also obscures other risks, including those created by exclusive attention to the risks associated with the emergency. More specifically, the emergency framing encourages us to ignore the fact that there are other risks at least as serious as the risk posed by the putative emergency—and to forget that we do not think it appropriate to adopt such extreme measures to respond to those risks. For example, a case can be made that the risks associated with climate change are far more serious and will affect far larger numbers of people than those associated with COVID-19. The same is true of the health risks of several types of pollution.[6]

B. The normative implications of an emergency

It is crucial to understand that the term "emergency" is not simply descriptive. It has two important normative implications. The first is that in an emergency, the normal moral rules may not apply. In other words, it can be permissible and even obligatory to do things in an emergency that otherwise would be morally or legally prohibited. The second normative implication is that, in order to respond effectively to an emergency, government officials or others who are best positioned to avert the harm the emergency threatens may exercise extraordinary powers. Taken together, these two normative implications of the belief that an emergency exists transform our understanding of the moral and political scene. And, I shall argue, unless this belief is embedded in a sound understanding of the moral risks of the emergency framing, it does so in ways that encourage behavior that is both irrational and immoral.

Both of these normative implications of the belief that there is an emergency create moral risks: that moral rules that ought to be followed will be disregarded and that those in power will exercise excessive power. So, it is imperative to ask two questions: When does an emergency exist and when has it ceased? Who ought to be authorized to declare that an emergency exists or has ceased to exist? The public ought to have good reason to be confident not only that emergencies will be declared when they do exist, but also that there will not be false declarations and, just as importantly, that they will be told when an emergency no longer exists—and that policies will be altered to reflect this fact.

[6] See, e.g., Benjamin Bowe et al., "Burden of Cause-Specific Mortality Associated with $PM_{2.5}$ Air Pollution in the United States," *Journal of the American Medical Association Network Open* 2, no. 11 (2019): 1–16; Neal Fann et al., "Estimating the National Public Health Burden Associated with Exposure to Ambient $PM_{2.5}$ and Ozone," *Risk Analysis* 32, no. 1 (2012): 81–95.

Because the declaration of an emergency is thought to justify extraordinary powers and free them of ordinary moral constraints, political leaders who are authorized to declare emergencies have conflicting incentives. They have a fiduciary duty to the public to make accurate statements about emergencies, but they also have an interest in declaring emergencies when they don't exist and in not declaring the end of an emergency when it has in fact ceased. That is so because convincing the public that there is an emergency increases their power and expands their options.

C. The need for institutional safeguards regarding the declaration of an emergency

Unfortunately, institutional arrangements frequently do not include adequate measures to prevent abuses of the power to declare emergencies. One obvious solution would be an institutionally prescribed division of labor. Those who profit most from the public believing that there is an emergency should not be able (at least not unilaterally) to declare an emergency. Nor should they be entitled to determine (at least not unilaterally) when an emergency no longer exists. This is a simple point of sound institutional design, but one that is almost universally ignored: the requirement of incentive compatibility.

Alternatively, a declaration of an emergency could have a predetermined expiration date, a "sunset clause," with a requirement that a hefty burden of public justification must be borne if the emergency framing is to be reinstated. Another institutional safeguard would be to legislate statutes that specify, to the extent that this is possible, what qualifies as an emergency and which government agencies are allowed what sorts of special powers during an emergency.[7]

Given the profound moral and political implications of framing a situation as an emergency, it is disturbing that during the COVID-19 pandemic so little attention was paid to understanding what counts as an emergency, to who can be trusted to declare an emergency, and, perhaps most importantly, to the need for ongoing reevaluation of the assumption that we are in an emergency. Indeed, the risks of the emergency framing have been exacerbated by the fact that there is no requirement of a formal process for proclaiming an emergency or implicitly framing the situation as an emergency.

[7] There are such statutes in the U.S.; they specify when particular agencies are permitted exceptional powers, due to an emergency. The U.S. Fifth Circuit Court of Appeals determined that President Biden's workplace vaccine mandate—which was presented by the U.S. Labor Department as falling under an emergency exception—did not satisfy the conditions laid down in the statute. U.S. Fifth Circuit Court of Appeals, granting temporary injunction against workplace mandate, *State of Louisiana et al. v. Joseph Biden, Jr.*, No. 22-30019 (5th Cir. 2022), https://www.ca5.uscourts.gov/opinions/pub/22/22-30019-CV0.pdf.

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D. Is COVID-19 (still) a national emergency?

Too little attention has been paid to an extremely important question: What is the scope of the emergency? Is the entire nation in an emergency or only a portion of it (in the present case, only those at high risk of death or serious persisting effects of COVID-19 infection)?[8]

In the early stages of the COVID-19 pandemic, there was great uncertainty as to both the transmissibility and the lethality of the virus. Under those conditions, the emergency framing was reasonable. Furthermore, it may even have been reasonable to proceed as if the entire country and indeed the whole world was in an emergency, because information to determine the scope of the supposed emergency was not yet available.

We now know, however, that the damage caused by the disease varies greatly across countries.[9] We also know there is extreme variation within countries. For example, there is now good evidence that in the United States mortality is confined almost exclusively to those with preexisting serious health problems and the very elderly, that is, people whose life-expectancy prior to infection is far below average.[10] More specifically, there is evidence that perhaps as much as 75 percent of hospitalized COVID-19 patients have at least one co-morbidity.[11] We also know that at most only 1.1 percent of Americans infected with COVID-19 died as a result.[12] Given these facts, it is questionable to hold that the pandemic is a national emergency in the case of the United States.

I am not denying that COVID-19 is a serious illness. Nor am I denying that some locales in the U.S. experienced conditions for which the term "emergency" is apt. For example, some intensive care units were overwhelmed and some cities had higher than average rates of hospitalizations. However, acknowledging that is compatible with realizing that it is both misleading and dangerous to assume that the entire country or the entire world is in a state of emergency.

[8] An epidemic can be a national security concern even if, strictly speaking, there is no health emergency that is national in scope.

[9] See, e.g., Christina Goldbaum, "The Pandemic Has Deepened Global Hunger, with Poorer Countries Sinking Deeper into Crisis," *The New York Times*, August 6, 2021, https://www.nytimes.com/2021/08/06/world/the-pandemic-has-deepened-global-hunger-with-poorer-countries-sinking-deeper-into-crisis.html; Indermit Gill and Philip Schellekens, "COVID-19 Is a Developing Country Pandemic," *Brookings*, May 27, 2021, https://www.brookings.edu/articles/covid-19-is-a-developing-country-pandemic/#:~:text=Excess%20mortality%20rates%20for%20the, actually%20about%203%20percent%20lower.

[10] As of November 11, 2021, the rate of COVID-19-related deaths to reported cases in the United States is about .016%. See the CDC COVID-19 data tracker: https://covid.cdc.gov/covid-data-tracker/#datatracker-home. Note that there are likely to be many unreported infections, making the actual mortality rate even lower. See also Clara Bonanad et al., "The Effect of Age on Mortality in Patients With COVID-19: A Meta-Analysis with 611, 583 Subjects," *Journal of the American Medical Directors Association* 21, no. 7 (2020): 915–18.

[11] Radu Silaghi-Dumitrescu et al., "Comorbidities of COVID-19 Patients," *Medicina* 59, no. 8 (2023): 1393.

[12] "Mortality Analyses," *Johns Hopkins Coronavirus Resource Center*, https://coronavirus.jhu.edu/data/mortality.

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E. How misuse of the emergency framing biases policy

Assuming there is a national emergency when there is not encourages highly questionable policy choices. Instead of focusing efforts on preventing and mitigating harms to those who are actually at serious risk, resources are used less productively in an effort to protect the entire population.

For example, President Joe Biden apparently espoused the goal of vaccinating virtually every American—or at least the vast majority of them—and Dr. Fauci urged that all Americans should receive multiple booster shots.[13] Australia, in conjunction with draconian lockdown measures that have only been recently relaxed, has achieved a 90 percent vaccination rate. Such measures look more plausible and less controversial if one assumes that there is a national emergency. If there was no truly national emergency, they are highly questionable, given their costs.

F. Taking alternative approaches seriously

Given the high economic and psycho-social costs of lockdowns, such policies are not justified in the absence of some approximation of a cost-benefit analysis. It is also difficult to see how the public can have assurance that lockdowns or extremely ambitious vaccination policies are justified when those announcing them fail to address the question of whether their costs exceed their benefits. Even more questionable is the absence of any acknowledgement of the costs.

Here, it is important to emphasize that it is a mistake to think that if all were vaccinated, this would stop the spread of the disease. Even vaccinating 100 percent of Americans would not achieve the goal of zero new infections, since no vaccine is 100 percent effective. Furthermore, there is good evidence that vaccination, even with multiple "boosters," at best only marginally reduces but does not stop transmission[14] and that transmission rates among the vaccinated and unvaccinated are not dramatically different after a short period of time following vaccination.[15] In addition, it appears that immunity achieved through vaccination is not as durable as immunity gained from having been infected with the virus. While it is true that natural immunity plus the immunity conferred by vaccination is more durable than natural immunity alone, the question is whether that additional benefit is

[13] See Dana Bash, "Should You Get a Booster Shot? Hear Dr. Fauci's Recommendation," *CNN*, November 11, 2021, https://www.cnn.com/videos/health/2021/11/21/fauci-covid-19-booster-shot-vaccination-bash-sotu-vpx.cnn.

[14] Marc Lipsitch and Rebecca Kahn, "Interpreting Vaccine Efficacy Trial Results for Infection and Transmission," *Vaccine* 39, no. 30 (2021): 4082–88; Antonio Vitiello et al., "COVID-19 Vaccines and Decreased Transmission of SARS-CoV-2," *Inflammopharmacology* 29, no. 5 (2021): 1357–60.

[15] Anika Singanayagam et. al., "Community Transmission and Viral Load Kinetics of the SARS-CoV-2 Delta (B.1.617.2) Variant in Vaccinated and Unvaccinated Individuals in the UK: A Prospective, Longitudinal, Cohort Study," *The Lancet: Infectious Diseases* 22, no. 2 (2022): 183–95; Annelies Wilder-Smith, "What Is the Vaccine Effect on Reducing Transmission in the Context of the SARS-CoV-2 Delta Variant?" *The Lancet* 22, no. 2 (2022): 152–53.

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worth the cost. I have seen no public statement by any high-level U.S. public health officials that includes even an acknowledgement that there are costs, much less a calculation to show that the benefits of mass vaccinations exceed the costs.

There is, however, a second reason to question massive vaccination campaigns. Such efforts ignore a fundamental fact, namely, that in virtually all cases the marginal costs of risk reduction are increasing. Beyond a certain point, each additional increment of risk reduction comes at an unacceptable cost. It may well be that the benefits of mass vaccination have been grossly oversold, while the costs have been ignored or severely discounted.

It is crucial to avoid the fallacy of stating that the benefits of mass vaccination clearly exceed the costs because "vaccination is cheap." Although the marginal cost of vaccines is negligible, the total costs are significant. The total costs include the costs of storing and distributing the vaccine, the cost of employing health-care workers to administer the vaccine, and the time and employment losses of everyone who interrupts her normal activities to get vaccinated. My point is not that it is clear that these total costs outweigh the benefits, rather, it is that it is not obvious, in the absence of a serious cost-benefit analysis, that they do not.

Even if we assume (quite wrongly) that it is proper for policymakers of country A to focus only on the well-being of the population of A, a policy of vaccinating virtually the entire population or the vast majority of citizens may well be untenable. Whether or not that is so may be difficult to determine, but it is not at all difficult to see that something has gone awry when policymakers assume—rather than make the case to the public—that there is so much benefit in such ambitious vaccination programs that there are no countervailing opportunity costs to citizens of country A.

Given that vaccination is far from fully efficacious in protecting the vaccinated individual from infection and even less so in stopping transmission of the virus, responsible policymakers should consider how much good could be done for the population of country A if fewer resources were devoted to such ambitious vaccination goals. For example, those resources could produce greater benefit if they were used to provide better treatment for those who suffer serious effects from COVID-19, for providing better protection from infection from those who are most likely to suffer serious damage if they become infected, and for ensuring that efforts to treat those who are seriously ill from the virus do not hamper the functioning of the health-care system as a whole. So even from a standpoint of extreme national partiality, the vaccination goals that some countries, including the U.S. and Australia, have pursued may be unjustifiable.

G. How the emergency framing fosters excessive national partiality

If one acknowledges that the lives of foreigners count at all, the goal of vaccinating all or the vast majority of the citizens of a country becomes even

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more questionable, even if one supposes, wrongly, that vaccinating all would virtually end COVID-19 infections in the country. Why should one country show such partiality to its own citizens as to reduce the morbidity and mortality of COVID-19 to below what it tolerates in an especially bad flu season, if doing so deprives people in other countries of vaccines they need to avoid far greater morbidity and mortality? Intuitively, the extreme national partiality evidenced in Biden's goal of vaccinating all Americans or the Australian vaccination policy—and even the less ambitious goal of reaching herd immunity that some other countries are pursuing—all seem excessive, because they ignore the horrific opportunity costs in terms of forgone benefits to those in other countries.

Unfortunately, some public health experts—apparently those who have had the most influence on U.S. policy—assume that the goal is to stop the spread of the virus, regardless of costs. Or they merely assume that the costs are not too high, but without feeling the need to demonstrate that this is so. That would explain why they advocate vaccination at least to the point of herd immunity; it is because they believe that once that goal is achieved, the virus will not spread and they are fixated on stopping the spread, regardless of costs.

My point is that another view is worth considering, but it has not been given a fair hearing, at least not in public health messaging to the public. That view is that stopping well short of herd immunity may be morally required in order to have the resources needed to fulfill the duty to help those in other countries or to have sufficient resources to treat serious COVID-19 cases without undermining the functioning of the health-care system. To proceed as if the goal is to stop the spread of the virus by achieving herd immunity or by vaccinating an even greater percentage of the population is to give no weight whatsoever to the needs of people in other countries.

The fact that emergencies are dynamic, not static, is crucially important. When the COVID-19 pandemic began, the severity of the peril was uncertain and it was reasonable for a country to show extreme partiality toward its own citizens. However, once it became clear that the vast majority of a country's citizens were not in great danger and that people in other countries were in much greater danger and in more urgent need of help, then a country's policies ought to change accordingly. At that point, partiality ought to be limited by the triage principle. Instead perhaps, the presumption should be that aid will be provided to those most at risk, qualified by national partiality only so far as that is compatible with avoiding a large disproportion between the benefits to co-nationals resulting from according them preference and the losses to foreigners that could have been prevented had partiality to co-nationals not been given.

H. Misguided public health ideology

If the virus does not in fact cause death or serious illness for the vast majority of the population, then the costs of trying to stop its spread may

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well be prohibitive. At the very least, those officials who opt for policies that aim to stop the spread owe the public an explanation of why those costs do not matter or why they are outweighed by the benefits of stopping the spread. Neither has been provided. It is not at all obvious, however, that stopping the spread of the virus is a reasonable goal.

Such a claim will sound heretical to those in the grip of a public health ideology focusing only on the negative health effects of a disease. When, in a public discussion at Cambridge University, I questioned whether the goal of achieving herd immunity through vaccination was appropriate, a public health official reacted with incredulity, explaining that herd immunity prevents the spread of a disease. He never questioned the assumption that the goal was to stop or reduce as much as possible the spread of the disease. He also apparently either thought that the costs did not matter or that it was obvious that the benefits of stopping the spread of the virus outweighed them.

Lockdown policies as well as efforts to vaccinate virtually everyone have proceeded on the unreflective assumption that the goal is to reduce the spread of the virus as much as possible. That goal, unless qualified with a "without excessive costs" proviso, is irrational and immoral. Furthermore, it may not be the best way to protect those at high risk, even if one sets aside the issue of costs.

Suppose, instead, that we were to abandon the dubious notion of a national emergency and focus on preventing and mitigating harms for those at serious risk. Targeted, as opposed to broad-brush, policies then become plausible.

The goal of stopping or greatly limiting the spread of a virus might have been both reasonable and attainable, without excessive costs if, very early in the COVID-19 pandemic, the following combination of measures to ground a targeted strategy had been employed. (1) Readily available data as to which groups were at high risk were utilized, for it was clear very early that the elderly and those with several co-morbidities were at exceptionally high risk. (2) Systematic sewage sampling was used to determine which cities or regions were "hotspots." (3) Mass testing was employed to enable tracing of contacts and isolation and treatment of those identified as infected.

As it happened, the capacity for mass testing was not developed until very late in the pandemic—too late to allow contact tracing and isolation and treatment to curb the spread of the disease. That in itself may be regarded as a policy failure. Be that as it may, (1) and (2) were feasible from the outset of the pandemic and, arguably, would have done as well or better at curbing the spread of the virus than the untargeted, "shotgun" measures that were employed. A targeted approach would have avoided the economic and psycho-social harms of lockdowns and the costs of massive vaccination plus booster programs.

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I. The need for cost-benefit analysis

In sketching a targeted alternative to the policies adopted in the United States, I do not pretend to have shown that is superior from the standpoint of the cost-benefit ratio, much less that it is superior all things considered. Nor do I pretend to have provided conclusive arguments against the policies that were adopted. My aims are modest but important nonetheless. First, I want to make it clear that there are serious doubts as to whether some of the high-impact policies adopted in the U.S. were the best feasible alternatives. Second, I also point out that U.S. officials utterly failed to provide reasonable public justifications for these policies: They did not publicly identify their costs, much less make the case that the benefits exceed the costs.

Here, it is important to understand the proper use of cost-benefit analysis in choosing public policies. It is a mistake to regard cost-benefit analysis as a decision rule, that is, to assume that the policy that has the most favorable ratio of benefits to cost is the best policy. To do so would in effect be to assume a highly controversial moral theory, namely, utilitarianism. The point, as David Schmidtz argues, is that cost-benefit analysis is a decision tool, not a decision rule.[16]

Those who endorse a particular policy are likely to be much impressed by its supposed benefits—perhaps so impressed that they underestimate the costs, unless they are required to go through the exercise of identifying and attempting to quantify the costs. Furthermore, there is the danger of bias. For example, the public health officials who recommended lockdowns were most certainly members of the portion of the workforce who could work from home; they were not low-wage workers in the service industries who would be financially adversely affected by closing restaurants, canceling cruises, and closing public entertainment venues. In addition, it may be that public health experts are prone to another bias: focusing only or primarily on reducing the direct threat to health that disease imposes, while neglecting to take seriously the indirect negative health effects and other costs of the policies they think will best reduce the direct health risks of the pandemic. Requiring officials to publicly identify all costs can help correct for such biases. If the policy that officials recommend clearly has costs that exceed its benefits, it is a nonstarter. In this way, the requirement of a publicized, formal cost-benefit analysis can improve decision-making.

It is shocking that in advocating their policies, public health officials in the U.S. did not feel compelled to provide anything approaching an adequate public justification for them, one that at least met the minimum requirement of including the results of a cost-benefit analysis. In the U.S. case, there were plausible criticisms of the approach the government opted for—in

[16] David Schmidtz, "A Place for Cost-Benefit Analysis," *Philosophical Issues* 11 (2001): 148–71.

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particular, those raised by the authors of The Great Barrington Declaration.[17] However, those in charge of policy did not respond publicly nor on the merits of these dissenting voices. Instead, as recourse to the Freedom of Information Act has recently revealed, the response by the Director of the National Institutes of Health was to urge that a campaign be undertaken to discredit the authors of the Great Barrington Report, with no effort to engage their work on the merits.[18]

Given that they are unelected officials and therefore not accountable through electoral processes, the obligation of public health policymakers to provide public justifications for controversial policies is all the greater. Satisfying the requirement of public justification is necessary, if there is to be anything approaching adequate accountability. This requirement also greatly decreases the possibility that seriously erroneous policy choices will be made.

VIII. Domestic Institutional Reform for the Sake of Accountability and Legitimacy

I have not attempted to demonstrate conclusively that U.S. pandemic policy was deeply flawed in substance, though I have said enough to make that possibility highly plausible. What I have shown is that the public has three good reasons to doubt some of the policies that were adopted. First, policymakers failed to discharge their responsibility to provide reasonable public justifications for their policies, justifications that would have to include some reckoning of the costs and benefits of the policies. Second, there were reasonable alternative policies and credible criticisms of the policies that were adopted, yet government officials failed to respond to these views publicly on the merits. Third, public health officials misrepresented controversial moral judgments as matters of scientific expertise and also failed to acknowledge the extent of disagreement within the scientific community.

Perhaps the single greatest flaw of the decision-making process was its lack of accountability. By accountability, here I mean something specific: a public set of criteria for evaluating institutional performance, some agent authorized to apply the criteria and make a judgment as to whether they were satisfied, and some mechanism for imposing significant costs on those whose actions failed to satisfy the relevant criteria.

The failure of accountability occurred at two levels. First, there were no institutional mechanisms to ensure that dissident voices were taken seriously, and so no assurance that top policymakers would have to consider and respond publicly concerning the substance of objections to those who

[17] Martin Kulldorff et al., "Great Barrington Declaration," October 4, 2020, https://gbdeclaration.org/.

[18] Yaffa Shir-Raz et al., "Censorship and Suppression of Covid-19 Heterodoxy: Tactics and Counter-Tactics," *Minerva* 61, no. 3 (2023): 407–33.

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reasonably disagreed with their policies. Second, there was far too little in the way of accountability for mistakes. While it is true that Centers for Disease Control officials have been criticized and suffered reputational damage in some quarters, they have not incurred concrete costs, even in the form of official reprimands. More importantly, at this point, there is no indication that there will be an impartial review of their behavior that will attach serious costs to a negative evaluation. Public health officials at the highest levels should be among the first to insist on such a review. Yet they have not done so. For all of these reasons, the much lamented loss of public trust, the legitimacy deficit that threatens to undermine even the best of policies in the next pandemic, is not only understandable, but fully deserved. Here, I will only begin the difficult task of outlining some of the institutional changes that would need to be made to make pandemic policy-making more defensible and policymakers more accountable. I propose these guidelines for restructuring the national institutions charged with responding to a pandemic, both for the sake of improving the quality of decisions and for helping restore the public trust necessary for an effective response to the next pandemic. To make these guidelines effective, new legal obligations would have to be created by state and federal legislatures:

(1) Important policy choices should be publicly justified, where justification includes the results of a publicly available cost-benefit analysis, with attention given not only to direct health effects but to all costs, including indirect effects on health, and economic and psycho-social harms likely to be caused by the implementation of the policy.
(2) The factual information on which the justification relies should come from publicly available, credible sources, with explicit public acknowledgement of any significant disagreements about them on the part of members of relevant scientific communities.
(3) Within the time constraints needed for effective action, criticisms of the proposed policy should be invited. It might even be advisable to have an official "devil's advocate" charged with publicly challenging policy proposals.
(4) Officials advocating a policy should be required to respond to dissenting voices, at least when they issue from persons with plausible credentials. The identification of properly credentialed critics should not be left to the officials whose policies are being challenged.
(5) There should be periodic reviews of pandemic policies, with a much more extensive review after the pandemic ends. Officials should be on notice that they will be held personally responsible where this means being subject to significant costs—such as official reprimands, firing, cancelling of retirement benefits, civil and/or

criminal charges, expulsion from professional societies, etc.—if the ex post review finds they have acted wrongly.

(6) All public health messaging regarding the pandemic should include (a) the statement that the policy advocated is, in the opinion of those advocating it, the most reasonable given current knowledge, but is subject to revision or abandonment, as the information or the situation changes; and (b) the statement that the policies recommended are not the product of purely scientific judgments, but also include normative assumptions that may be subject to dispute. Misrepresentation of the extent of scientific judgment should be subject to significant penalties.

(7) It should not be assumed that there must be a national policy on every pandemic issue. Where there is considerable uncertainty as to which policy is best, there should be a presumption in favor of allowing local authorities to pursue different options.

(8) The highest-level officials in national public health institutions should be subject to term-limits and to periodic bipartisan review, with clear penalties for unfavorable review results known in advance.

It might be objected that the standards I am proposing are so demanding that they will deter able people from seeking positions of authority in public health institutions. My reply is that the accountability regime I am suggesting focuses on good procedures. If officials follow those procedures, they will not be at undue risk.

IX. Conclusion

Preparing for the next pandemic is a complex task. An important aspect of preparation is to undertake an impartial evaluation of the most important policies that were adopted and then propose alternative policies. I have not done that. Instead, I have argued that regardless of what position one takes on the substance of U.S. COVID-19 policies, there is good reason to believe that both the decision-making process and the presentation of its results to the public were deeply flawed and I have argued that the flaws were institutional failures. Consequently, I have recommended institutional changes to improve the decision-making process and hold officials accountable. I have also argued that there is a need for institutional innovation at the international level, so as to avoid a repetition of the situation in which the governments of wealthy countries and pharmaceutical companies acknowledge that they have responsibilities to those in poorer countries, but conveniently leave the nature of the responsibilities so vague as to ensure that not enough will be done.

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