



The importance of getting the ethics right in a pandemic treaty

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The COVID-19 pandemic revealed numerous weaknesses in pandemic preparedness and response, including underfunding, inadequate surveillance, and inequitable distribution of countermeasures. To overcome these weaknesses for future pandemics, WHO released a zero draft of a pandemic treaty in February, 2023, and subsequently a revised bureau's text in May, 2023. COVID-19 made clear that pandemic prevention, preparedness, and response reflect choices and value judgements. These decisions are therefore not a purely scientific or technical exercise, but are fundamentally grounded in ethics. The latest treaty draft reflects these ethical considerations by including a section entitled *Guiding Principles and Approaches*. Most of these principles are ethical—they establish core values that undergird the treaty. Unfortunately, the treaty draft's set of principles are numerous, overlapping, and show inadequate coherence and consistency. We propose two improvements to this section of the draft pandemic treaty. First, key guiding ethical principles should be clearer and more precise than they currently are. Second, the link between ethical principles and policy implementation should be clearly established and define boundaries on acceptable interpretation, ensuring that signatories abide by these principles.

Background

Experts estimate a roughly 50% chance of another pandemic in the next 25 years.¹ Before the next pandemic, the world must remedy the weaknesses COVID-19 revealed in global preparedness for, and in response to, a pandemic. These weaknesses include the underfunding of pandemic preparedness, inadequate disease surveillance, initially slow response to an emerging pandemic, early challenges in procuring personal protective equipment, inequitable distribution of countermeasures (especially vaccines), and fragmented global response.²

To address these problems and fundamentally reorganise pandemic prevention, preparedness, and response, the World Health Assembly passed a resolution in 2021 to begin negotiations for an international pandemic instrument.³ After a series of intensive deliberations among member states and other stakeholders, WHO released a so-called zero draft of its pandemic treaty in February, 2023.⁴ A revised bureau's text was subsequently released in May, 2023, which moderated several provisions and provided a series of options for treaty language.⁵ The treaty is expected to go through further amendments and redrafts before it is finalised.

Unless otherwise specified, references in this Personal View to treaty content will be to this latest bureau's text. This treaty sets out specific, legally binding obligations intended to address the substantial failures the COVID-19 response revealed. Among various options, the bureau's text draft of the treaty proposes: a global pandemic supply and logistics network chain; intellectual property waivers for pandemic-related products; knowledge-sharing and research cooperation; centralised pathogen collection and sharing; sharing of a portion of pandemic-related products as they are manufactured; global funding for pandemic preparedness and response; and coordinating treaty provisions under WHO.

Pandemic prevention, preparedness, and response reflect choices and value judgements. While these decisions must take into account scientific, technical, logistical, and other non-normative considerations, they are fundamentally grounded in ethics.⁶ To say that the global community fell short with previous pandemics is to identify an ethical failure to live up to our obligations to protect the interests, wellbeing, and rights of our fellow human beings.^{7,8} UN Secretary-General António Guterres has called COVID-19 vaccine inequity “the biggest moral failure of our times”.⁹ Accepting that past shortcomings reflect ethical failures, the prospect of improving future approaches to pandemics should be informed by ethics to ensure their success. The bureau's text reflects this need for an ethical viewpoint by including Article 3 entitled *Guiding Principles And Approaches* that is meant to guide its implementation. Most of these principles are ethical—they establish core values that animate the treaty. Moreover, the treaty's main public health provisions, such as equitable access and sharing of resources and interventions, are shaped by ethical considerations such as equity and human wellbeing.

Given the political forces that might affect countries' willingness to sign a pandemic treaty or faithfully conduct its provisions, adequate articulation of ethical principles cannot guarantee the treaty's success. Nevertheless, centring ethics in a pandemic preparedness treaty is crucial. Political positions themselves are grounded in ethical values or views, which includes the drive to promote national interests that might sometimes be in tension with global cooperation. Articulating parties' responsibilities in a legally binding document provides a source of mutually recognised obligations and not just rules of conduct.¹⁰ Where the treaty leaves room for discretion and interpretation, parties to the treaty are bound to take into account the explicitly delineated ethical principles in implementing treaty provisions.

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Public justifications and accountability for said policies can in turn appeal to these principles. And although the treaty has inadequate enforcement mechanisms, delineation of underlying ethical principles establishes a shared, explicit international standard for countries' obligations, which can be leveraged to exert pressure if parties do not abide by the treaty. Like the ideal of human rights, over time these principles can become recognised as canonical.

However, the treaty's set of principles are numerous, overlapping, and lack coherence and consistency, in a way that could lead to a biased selection of ethical principles. As such, the treaty principles are unlikely to be effective. Consequently, we propose two improvements to this pandemic treaty. First, key guiding ethical principles should be clearer and more precise. Second, the link between ethical principles and policy implementation should be clearly established and define boundaries on acceptable interpretation, ensuring that signatories cannot simply do whatever they want.

Better delineating core principles

The precision and clarity of the current draft can be improved in three ways: streamlining the number of principles; adding important, overarching principles; and distinguishing substantive from procedural principles.

Streamlining principles

The latest bureau's text reduced the number of principles from 18 contained in the zero draft to 12 in the current version that, taken together, should guide parties to achieve the treaty's objectives and implement its provisions. This streamlining is a step in the right direction, but could be taken further. Not all enumerated principles are ethical in nature, which might cause confusion in terms of how to consistently apply the principles. Other WHO documents better exemplify parsimony, including the *WHO Guidance For Managing Ethical Issues in Infectious Disease Outbreaks* (seven principles),¹¹ the *Ethical Framework For WHO'S Work in the Act-Accelerator* (seven principles),¹² and the *WHO SAGE Values Framework for the Allocation and Prioritization Of COVID-19 Vaccination* (six principles).^{13,14}

To further streamline the principles for ease of application, some principles could be removed and overlapping principles could be merged. For instance, the central role of WHO is a concrete treaty provision that can be ethically justified based on accountability and other principles, rather than being an ethical principle in itself. Similarly, the option in the bureau's text of removing the principle of One Health should be exercised given the principle's narrow scope, and that the ethical thrust of accounting for empirical facts about zoonotic pathogen origins can be captured by appeal to the separate, broader principle of science and evidence.

Missing key principles

Despite the treaty's stated objectives to prevent pandemics, save lives, reduce disease burden, and protect livelihoods,⁵ none of the 12 principles in the bureau's text (nor the 18 principles in the previous zero draft) explicitly captures wellbeing. Although principles such as proportionality or respecting human rights might indirectly reflect an underlying concern for maximising benefits and minimising harms, this concern obscures and, as a result, downplays the centrality of this concern in motivating and justifying various treaty provisions. Preventing harm and promoting benefits should be underscored as a fundamental ethical value and commitment, not left implicit or viewed as a consideration outside ethics.

Similarly, an explicit principle of sustainability is absent. Sustainability involves ensuring that short-term pandemic preparedness and response builds a foundation for enhanced responses to future pandemics, rather than sacrificing the future to the present (or vice versa).¹⁵ Sustainability relates to steady and reliable funding mechanisms to support treaty provisions, policies around intellectual property that could affect incentives to produce countermeasures, and the importance of conducting research during pandemics to ensure an evidence base for future emergencies, as well as the long-term viability of new systems of research, development, and production envisaged by the treaty.

Distinguishing substantive and procedural principles

The treaty should distinguish substantive and procedural principles. Substantive principles relate to questions asking what is the right decision or optimal outcome. Procedural principles relate to processes and how should signatories make decisions. Procedural principles determine the mechanisms for applying and enforcing substantive principles. Although some principles might address both substantive and procedural matters, identifying principles' primary category can help clarify their function in decision making.

For example, equity is primarily a substantive principle, as are its dimensions, such as non-discrimination and not compounding unfair disparities. Engagement and accountability are procedural principles. Determining what is ethically appropriate in pandemic response—for instance, identifying the goals vaccine prioritisation should aim to achieve—should make reference to substantive principles. But an answer to the question of how the international community should balance the importance of relevant substantive principles, and then disseminate and implement their implications should be guided by and make reference to procedural principles.

The grounding role of human rights and sovereignty

Human rights and sovereignty should be understood as foundational values that underpin the treaty rather than guiding ethical principles.

	Definition	Illustrative treaty provision reflecting the principle
Substantive principles		
Maximise benefits and minimise harms	Protect and promote human wellbeing, including physical and mental health, social and economic security, human rights, and child development, while minimising the harmful effects of policies (whether direct or indirect, health-related or not)	Article 13 (supply chain and logistics), with an option to establish a global supply chain network to improve efficiency of pandemic response
Equity	Ensure fair deployment of pandemic prevention, preparedness, and response globally and within countries, prioritising those disadvantaged due to biological, social, or other factors; honouring obligations while avoiding unjust discrimination, compounding disadvantage, or exploitation of vulnerable parties	Article 12 (access and benefit sharing), with an option for a scheme for global sharing of countermeasures during a pandemic
Global solidarity	Act in a manner that acknowledges countries' international responsibility and interdependence, and that countries' interests are dependent on effective coordination of pandemic prevention, preparedness, and response	Article 15 (international collaboration and cooperation), supports joint and unified global efforts for pandemic preparedness, prevention, and response
Sustainability	Ensure that emergency responses that are appealing for the immediate problem do not imperil future responses, preparation for the next pandemic, or responding with research, development, and manufacturing to subsequent pandemics	Article 19 (financing), delineates funding expectations to sustain treaty provisions
Procedural principles		
Accountability	Make decisions with clearly defined objectives, targets, processes, roles, and responsibilities, supported by enforcement mechanisms to enable decision makers to be held to account and mitigate conflicts of interest	Article 20 (conference of the parties), assigns and details governance and responsibility for treaty implementation to a new entity housed under the World Health Assembly
Transparency	Publicly communicate the underlying rationale (including relevant risks and benefits), decision-making processes, and decisions related to pandemic prevention, preparedness, and response in an honest, straightforward manner, made available for public review	Article 9 (research and development), promotes open global sharing of knowledge and expertise from pandemic research and development
Engagement	Make decisions with the opportunity for input from relevant stakeholders such as civil society and community organisations, to the extent practicable and appropriate for a given context	Article 22 (implementation and compliance committee), delineates the role of signatories as well as other parties for inputs into treaty implementation
Science and evidence-informed decisions	Ensure decisions and policies are informed by the best available science and that they evolve in response to changing information	Article 18 (pandemic prevention and public health surveillance), delineates importance of information gathering via surveillance in pandemic prevention

Table: Substantive and procedural ethical principles and the illustrative treaty provisions that discuss them

Human rights

States have already signed human rights treaties and so the obligations they entail do not need to be included as a guiding principle. Instead, the pandemic treaty should be interpreted and implemented in light of existing human rights obligations. That being said, the breadth and universal applicability of human rights treaties means they cannot definitively resolve more crucial and nuanced pandemic policy questions. Indeed, the bureau's text makes scant, explicit reference to human rights after introducing them as a purportedly guiding principle. Rather than a policy objective or a framework for interpreting specific treaty provisions, human rights are better seen as a set of commitments that might inform the content and formulation of key principles,¹⁶ and motivate the importance of their implementation within the treaty.¹⁷ For instance, human rights to health and wellbeing can ground the principle of maximising benefits and minimising harms, and various human rights to fair and equal treatment support the principle of equity.

Sovereignty

Like human rights, national sovereignty is an established political and legal norm that already binds countries, irrespective of any provisions of the treaty.¹⁸ Furthermore, the inclusion of sovereignty as a guiding principle seems tautologous. The signatories are states, hence the treaty recognises the sovereignty of states. No separate principle

is needed. The treaty's obligations flow from signatories' sovereign decision to sign and ratify the treaty.

There might be some pragmatic value in going beyond the requirements of sovereignty and signalling to potential signatories that the treaty will not unduly interfere with individual countries' decision making.¹⁹ However, this value should be weighed against the fact that signatories might not treat the mandatory provisions as genuinely mandatory. This risk is compounded by inadequate enforcement mechanisms for treaty violations, a source of ongoing concern among observers,²⁰ as well as the bureau's text weakening the prescriptiveness of various provisions compared with the previous zero draft.^{4,5}

A principle of sovereignty also risks conflation with the related but distinct notions of nationalism and countries prioritising the interests of their own people. We will separately discuss the implications of national priority in the context of the treaty's countermeasure allocation model, which might be seen as a constraint or limitation on the realisation of the treaty's ethical principles rather than a principle itself.

Refining the principles

To help refine the principles, we propose four substantive and four procedural principles as a consistent and coherent framework to implement to form a global pandemic treaty (table). The proposed list encompasses

widely shared values that are generally acceptable both internationally and cross-culturally.^{12,13,21} Several of our proposed definitions draw on existing WHO guidance, particularly the *Ethical Framework for WHO's Work in the ACT-Accelerator*.¹² The careful review and revision of the *Ethical Framework* document by WHO supports these definitions within this international treaty, especially given WHO's prominent role in treaty governance.

Applying the principles to develop specific policies

Ethical principles should be applied to the treaty's provisions in two ways. First, the principles could outline the justifications for different treaty provisions and options. The treaty will legally bind signatories who will in turn adopt policies that apply to their citizens and residents. As such, some justification for the treaty's provisions is necessary. Articulating the principles that underlie any given article clearly, transparently, and accessibly conveys that justification, and facilitates ethically informed deliberation over which options to retain during negotiations. Such articulation would mean not merely listing principles relevant to a given treaty provision, but explaining how those principles motivate or justify the provision.

Second, the principles provide an ethical framework for the application of treaty provisions. Although some provisions are highly directive, such as Article 26 on the role of WHO Secretariat, others allow considerable discretion (eg, Article 9 on research and development capacity). The proposed principles might identify relevant value trade-offs required when interpreting and applying the treaty's provisions. Additionally, revealing how principles were evaluated and which ones were decisive in determining a given policy facilitates accountability. Such value adjudication is commonplace for all policy making. A universal list of principles provides a common set of standards that everyone shares, which can be appealed to for justification of particular decisions.

For illustrative purposes, we elucidate how the revised principles inform the deliberations around four crucial policies in the draft treaty and might favour implementing certain options found in the bureau's text over others. This elucidation is not meant to be model text for direct inclusion in the treaty, but indicative of the ways in which principles can be integrated into the treaty's text.

The allocation of scarce vaccines and other medical countermeasures

During the COVID-19 pandemic, the COVID-19 Vaccines Global Access initiative proposed allocating scarce vaccines primarily based on country population.²² Each country would first receive sufficient vaccines for 3% of its population, intended primarily for health-care workers and other front-line workers. Subsequently, each country would receive sufficient vaccine for 20% of its population.

Only afterwards would allocation consider countries' disparate COVID-19 health burden.²²

In Article 12 option 6(c).X, the bureau's text indicates that a new WHO network should allocate vaccines and other countermeasures equitably according to public health risk and need. This provision (justifiably) rejects distribution purely based on population.^{23,24} However, an alternative option 6(c).Z implies distribution should simply be to low-income and middle-income countries, while option 6(c).Y makes no mention of distributive standards.

Both the principle of maximising benefits and minimising harms, as well as the principle of equity, support allocating scarce medical resources on the basis of health risks (found in option 6(c).X, as well as in Article 13's discussion of distribution of pandemic-related products). In the context of a pandemic, countries facing the greatest health risk likely stand to benefit the most from receiving a given countermeasure, such as vaccines.²⁵ Such allocation also promotes equity by allocating based on the ethically relevant criteria of health risk as opposed to ethically irrelevant criteria such as purchasing power or population, allowing those who would otherwise be worst off to benefit.²⁴ Furthermore, maximising benefits and minimising harms means that the allocation should consider relevant benefits and risks broadly, reflecting not just risks from the circulating pathogen but also other, indirect health risks caused by the pandemic or health emergency, such as postponement of other immunisations or reduced health system capacity.

Contributing to a common pool of funds and increasing global manufacturing capacity

The international response to COVID-19 was plagued by inequitable distribution of effective countermeasures, particularly the initial distribution of vaccines. According to various estimates, well over a million deaths from COVID-19 by the end of 2021 could have been prevented by more widespread vaccine distribution and administration.^{26,27}

The treaty strives to mitigate this inequity by ensuring that those who receive pathogen samples and genomic sequences share their pandemic countermeasures. Article 12 option 12.B proposes the WHO pathogen access and benefit-sharing system (PABS), a network of WHO-coordinated laboratories to which signatories must send pandemic-potential pathogen samples. PABS then facilitates sharing of those samples with the global community. Furthermore, option 6(c).X proposes that any manufacturer whose products relied on accessing PABS samples or sequences must sign a standard material transfer agreement (MTA) that requires "real-time access by WHO to 20% of the production of safe, efficacious, and effective pandemic-related products", such as tests and vaccines. Because this MTA must be signed by any recipient regardless of whether they are (or reside in) a treaty signatory, PABS facilitates the

enforcement of pandemic countermeasures even against non-signatories.

PABS can best be understood as a pragmatic mechanism to advance key ethical principles of equity, global solidarity, and maximising benefits and minimising harms. These principles often align during pandemic response. For example, more widespread distribution of COVID-19 vaccines would have minimised harms by saving a million or more lives around the world.²⁶ Negotiating parties should consider to what extent this mechanism requires more fine-tuning, as loopholes could undermine the ability of the mechanism to realise the key ethical principles. For instance, the treaty could prohibit countries concurrently sending samples or sequences to a non-PABS repository that would not require recipients to sign the PABS MTA.

PABS thus permits countries receiving samples to retain no more than 80% of domestic production of a countermeasure. Some might see PABS as excessively restrictive of legitimate national priority. For instance, India completely stopped COVID-19 vaccine exports when its own cases spiked in 2021.²⁸ PABS would have required India to share 20% of its vaccine production regardless. This option's approach balances equity, global solidarity, and maximising benefits and minimising harms and legitimate national priority. Undoubtedly, countries have sound ethical reasons to give some priority to their own residents in pandemic response.^{23,29} Citizens must rely on their own government to ensure their wellbeing. Consequently, governments have an obligation to prioritise meeting the needs of their citizens.

But this national priority is neither absolute nor unlimited.³⁰ The interests of individuals beyond one's borders are ethically relevant, and give rise to obligations to those individuals in virtue of their humanity. Finding a balance between obligations to one's own citizens and obligations to the world is a difficult task. But it is possible to rule out extremes. Countries might not simply prioritise all their citizens, including those at low risk, before helping any people in other countries. Such an approach would undermine the principles of solidarity, maximising global benefit, and equity.

A commitment to set aside a proportion of products for international distribution as they are produced sets a reasonable limit on national priority, and so options 12.B and 6(c).X should be exercised. These options still allow the vast majority of supply to be dedicated domestically, reflecting countries' legitimate prioritisation of their own people's interests, while at the same time providing a meaningful and steady supply of products to the global community. The precise 20% level itself, however, cannot be directly derived from the ethical principles, nor from foundational values such as sovereignty or human rights. It remains to be seen whether the precise 20% number survives international negotiation, but some meaningful distribution across borders is essential to fulfil the

principles of equity and maximising benefits and minimising harms.

The ethical principles also illuminate a gap in the PABS arrangement. Sharing obligations should go beyond samples, sequences, and pandemic countermeasures. The principle of maximising benefits and minimising harms supports sharing any information or products that can reduce harms from pandemics, such as data related to surveillance or vaccine effectiveness.^{31,32}

Intellectual property and a sustainable pandemic response

In Article 7 option 11.A paragraph 5(a), the bureau's text calls for suspension of intellectual property during an emergency: the parties will "support time-bound waivers of intellectual property rights that can accelerate or scale up manufacturing of pandemic related products during a pandemic, to the extent necessary to increase the availability and adequacy of affordable" products. An alternative option put forward is to make no mention of time-bound waivers.

Whether suspending intellectual property rights would promote scaled-up manufacturing of affordable vaccines and other countermeasures is an empirical question that can be expected to have different answers in different pandemics.^{33,34} But if intellectual property suspension would improve short-term response to a particular pandemic, policy makers would then face a tension between short-term human wellbeing, equity, and solidarity, and the long-term sustainability of incentives to respond to future pandemics.

Current laws do not require pharmaceutical companies to invest in preparing for and combating a future pandemic. Indeed, during COVID-19, some pharmaceutical companies did not rush to develop vaccines and other countermeasures.³⁵ Absent public investment in countermeasures required financially incentivising companies to devote their intellectual, financial, and manufacturing resources to preparing for and conducting research, as well as developing and producing countermeasures. Intellectual property is one such incentive, and is currently the most common; however, other options such as prize systems are being proposed for the development of new antibiotics.³⁶ The principles require a careful balancing of the immediate response to maintain sustainability versus a long-term response to inevitable future pandemics. On balance, it is by no means clear if suspending intellectual property rights will sustainably maximise benefits and minimise harms. Any decision to uphold waiver language found in option 11.A needs to be publicly justified and shared.

Additionally, efforts to regulate firms' conduct should not focus solely on intellectual property. Although there is little evidence that intellectual property formed a meaningful barrier to COVID-19 response,³⁷ advance

purchase agreements clearly did, by directing most initial supply to wealthy countries.³⁸ An international treaty can and should regulate advance purchase agreements to ensure that at least some supply is distributed on the basis of equity and maximising benefits and minimising harms. Solidarity as well as equity would also counsel in favour of self-restraint and moderation by countries able to pre-purchase all supplies, when pre-purchase will preclude access for low-income countries who lack financial muscle to engage in advance purchasing agreements.

Funding mechanisms

In Article 19, the bureau's text seeks to ensure sustainable financing for pandemic prevention, preparedness, and response. These provisions are arguably essential to ensure that PABS and other treaty initiatives are successful. As the COVID-19 pandemic showed, equity and maximising benefits and minimising harms require more than just supplies of countermeasures. Logistics, transportation, and administration also involve substantial costs.

The bureau's text removed concrete, static commitments for both domestic funding (as a percentage of budgets) and international funding (as a percentage of gross domestic product [GDP]) found in the zero draft.

In some ways, this amendment was ethically justifiable. The so-called flat nature of the zero draft's percentages raises concerns about equity and maximising benefits and minimising harms. Specific targets for domestic spending will only make a difference if they alter practices in at least some countries. Binding decision makers to alter domestic spending allocations based on an arbitrary cutoff found in the zero draft risks directing health resources away from where they are needed most.

Similarly, the zero draft provisions on international funding could operate as a global tax for pandemic funding. Such a flat tax would be inequitable because redirecting, for example, 1% of GDP to WHO is a substantially greater burden for low-income countries than high-income countries. To promote equity, this provision would need to be revised to become a progressive tax that is sensitive to a country's ability to pay, rather than a flat tax that will disproportionately burden the worst-off.

However, the bureau's text did not replace the flat funding mechanism with a more progressive, equitable model. Instead, the bureau's text provides no concrete funding threshold or target at all, referring vaguely to annual contributions by parties, within their respective means and resources. This amount of discretion risks substantially underfunding the pandemic treaty, in turn endangering its financial sustainability and ability to maximise benefits and minimise harms. To realise the treaty's principles, future iterations of the treaty should revisit concrete financing targets with an eye towards equity by setting different targets depending on a country's resource levels.

Conclusion

These suggestions do not exhaust the ways that ethical principles inform and justify various treaty provisions and their interpretation. Procedural principles of transparency, accountability, and engagement underlie the treaty's move to centre WHO in coordinating and carrying out various treaty provisions, and as an entity with a clear governance structure that can be held accountable for decisions made at the global level. WHO itself is ultimately answerable to the global community, since it is a UN agency and can thereby be subject to reformation through action by member states. Furthermore, maximising benefits and minimising harms requires embedding learning, research, and evaluation into pandemic preparedness and response as reflected in the latest draft's Article 9. Such embedded learning does not only involve formal clinical trials. Learning should recognise and value the agency of low-income countries in generating real-world solutions to pandemic challenges that go beyond merely transferring knowledge from high-income countries to low-income ones.³⁹

Deliberation and discussion of all provisions as the treaty is amended and refined can be informed by keeping those ethical principles firmly in view. The principles can also help illuminate gaps within the treaty. For example, preventing pandemics from emerging in the first place would be the most effective ways to promote equity and maximising benefits and minimising harms. Yet the treaty overlooks ethical questions around outbreak suppression and early warning mechanisms such as surveillance. Such questions implicate values of privacy, liberty, and tensions between the data sharing needs of global health security and the economic and other interests of states.⁴⁰

Effective pandemic preparedness, prevention, and response requires identifying and addressing ethical issues both in advance and in real time, as well as acknowledging that the availability of even high quality, timely, and accurate information and data to policy makers does not always answer the question of what to do. Value judgements are central to all decision making and they need to be made in ways that are reflected in widely shared principles, engage seriously with relevant diversity of values and commitments, and are carefully considered and justified.

Contributors

All authors contributed equally to the writing of this Personal View.

Declaration of interests

The views expressed in this Personal View are solely those of the authors and do not reflect the positions of WHO or any other entities with which the authors are affiliated. GOS is a rapporteur for the COVID-19 Ethics and Governance Working Group and was a special rapporteur for the Act Accelerator Ethics & Governance Working Group. CAA is a member of the Access to COVID-19 Tools Accelerator Working Group. CAA has also received a grant from Wellcome Trust Discovery Award to conduct research on solidarity in global health and received honoraria for a webinar on cultural competence and psychiatric diagnosis in low-income and middle-income settings. SK serves on the WHO Ethics and

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