From Words to Laws

Partial Epistemological Shift in Post-COVID Global Pandemic Governance

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Abstract

The COVID-19 pandemic laid bare the limitations of existing global health governance, revealing fragmented coordination, inequitable resource distribution, and the structural weaknesses of legal instruments like the International Health Regulations (IHR). In response, a range of institutional reviews—including those by the Independent Panel for Pandemic Preparedness and Response, the Review Committee on the IHR, the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme, and the Global Preparedness Monitoring Board—have proposed reforms to strengthen preparedness and accountability. This chapter critically synthesizes those reports alongside academic

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debates on international legal compliance and the regulation of transnational public-private partnerships. It situates these developments concerning the WHO Pandemic Agreement adopted in May 2025, highlighting its normative aspirations and geopolitical constraints.

Beyond institutional reforms, the chapter advances a central argument: meaningful transformation in pandemic governance requires an epistemological shift. Specifically, it calls for rethinking global health not merely as a matter of state sovereignty and emergency containment but through a framework grounded in ethical principles such as transnational solidarity, the One Health paradigm, and equity, especially for the most vulnerable. The chapter interrogates how such a shift challenges existing regimes' anthropocentric, state-centric assumptions and opens space for more inclusive and equitable global cooperation. By bridging policy analysis with normative critique, the chapter contributes to reimagining global health governance as a site of ongoing contestation, where legal instruments are not an endpoint but are conceptual tools shaped by normative commitments and informing epistemic transitions.

Keywords

COVID-19 · Global health governance · Global health law · International law · Health inequities · International Health Regulations · Pandemic Agreement · Solidarity · World Bank · World Health Organization

Introduction

The pandemic of the coronavirus disease 2019 (COVID-19) triggered unprecedented international attention toward health governance, human rights, and structural inequality. While global calls for solidarity and equity surfaced prominently in early pandemic discourse, practical responses often entrenched existing asymmetries between and within states. In the aftermath, multiple reform efforts were launched to address these disparities and strengthen pandemic prevention, preparedness, and response. Most notably, in May 2025, the 78th World Health Assembly (WHA) adopted the WHO Pandemic Agreement under Article 19 of the WHO Constitution, marking a historic milestone in global health governance.

The Pandemic Agreement articulates a broad vision for equity, resilience, and cooperation, explicitly invoking principles such as the right to health, human rights protections, gender equality, and respect for persons in vulnerable situations. It also introduces a range of institutional mechanisms and commitments, from whole-of-society preparedness and a One Health approach to equitable access to pandemic-related health products and transfer of technologies. The Agreement reflects lessons learned from the inequitable access to COVID-19 vaccines and therapeutics, highlighting the need for geographically diversified production, inclusive governance, and transparent benefit-sharing systems (WHO-DG, 2025).

At the same time, the political compromises underlying the Agreement—and the absence of several key states, such as the United States, from the final endorsement process—signal persistent tensions between national sovereignty and global solidarity. Moreover, the Agreement remains a framework document, with key annexes and implementation details still under negotiation. As such, it provides an anchor and a contested terrain for reimagining pandemic governance that may reinforce global hierarchies (Gostin et al., 2025). This chapter critically engages with these evolving developments through an institutional lens, asking: To what extent does the WHO Pandemic Agreement reflect a transformative shift toward equity and justice in global health? How might its normative innovations reshape the operationalization of treaty-based approaches in future emergencies? And what tensions remain unresolved between national interest and the aspirations of global social justice?

Indeed, during the pandemic, the effectiveness of global health governance has played a significant role. "If this pandemic cannot catalyze real change, what will?" This is the question asked rhetorically by Rt Hon. Helen Clark and H.E. Ellen Johnson Sirleaf (2021), the former chairpersons of the Independent Panel for Pandemic Preparedness and Response (IPPPR), in the preface of their latest report published in November 2021. Back then, the 73rd WHA73 was convened virtually for the first time in the history of the WHO in May 2020. The WHA passed only one resolution, WHA73.1 on COVID-19 response, which requested that the WHO Director-General initiate "a stepwise process of impartial, independent and comprehensive evaluation" of the existing global pandemic response system. In recognition of the catastrophic failure of the international community to show solidarity in response to the COVID-19 pandemic, the WHA established an Intergovernmental Negotiating Body (INB) in its Second Special Session. The Secretariat has thus developed the "zero draft" of a pandemic treaty for discussion.

Between the resolution WHA73.1 and the "zero draft," in response, intergovernmental and public-private collaborative efforts have produced numerous reviews of the global COVID-19 response. Most problems concerning the global governance structure of disease outbreaks have been exposed during the COVID-19 pandemic and in most previous epidemics. As per member states' request in resolution WHA73.1, the WHO established three review mechanisms: IPPPR, Review Committee on the Functioning of the International Health Regulations (IHR) 2005 during the COVID-19 Response (IHR-RC), and Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme (IOAC). In addition, summits and forums outside the WHO system have also put forward reviews of and recommendations on global preparedness and response, including the Global Preparedness and Monitoring Board (GPMB), the Pan-European Commission on Health and Sustainable Development, the G20, the G7 Summit, and so on.

This chapter will first synthesize all the reports and background papers published by the IPPPR, IHR-RC, IOAC, and the GPMB, considering the academic debates and related proposals about the global pandemic response and governance. These documents map out how intergovernmental and nongovernmental organizations imagine global health governance to become should an international treaty exist. However, this chapter refocuses on evaluating state compliance with and

responsibility for global health legal instruments, a concern for all international legal instruments. After all, beyond reforming the existing mechanisms, a real transformation will occur only if the epistemological and normative foundations of global health governance are rebuilt. This envisioned epistemological shift from state-centric, emergency containment to a framework grounded in transnational solidarity, One Health, and equity necessitates tangible operational changes.

Practically, the epistemological shift means a critical re-evaluation of the persistence of national sovereignty concerns, deeply entrenched political and economic interests that resist this fundamental reorientation, underscoring the ongoing contestation over global health governance. For instance, an equity-centered approach would prioritize investments in local manufacturing capabilities for health products in low-income settings, moving beyond a reliance on market-driven supply chains that exacerbated social and health inequalities during COVID-19. Most assessments mentioned above had focused on institutional rearrangements and the technicality of legal instruments. Yet, it is evident in recent years that it should be equally important for all to "rethink," normatively, what global health governance means to the states, to the WHO and other intergovernmental agencies, and to us, people living in different conditions.

Updating Legal Infrastructure for Pandemic Response

The WHA adopted the WHO Pandemic Agreement in May 2025 under Article 19 of the WHO Constitution, following more than 3 years of INB-led intergovernmental negotiations. Article 19 grants the Assembly the authority to adopt legally binding conventions—a power previously invoked only once, for the Framework Convention on Tobacco Control (FCTC). Unlike the IHR 2005, which operates through state self-reporting and is difficult to enforce, the new Pandemic Agreement aims to establish a broader normative framework with stronger provisions for solidarity and equity. It is important to note that the newly adopted international treaty is not intended to replace the IHR but to guide and complement it. Both instruments jointly structure the global health emergency architecture (Gostin et al., 2025). This duality is explicitly acknowledged in the 2025 World Health Assembly resolution WHA78.1, which stresses the need for coherence between the IHR 2005 and the WHO Pandemic Agreement.

This chapter identifies six major themes from various assessment reports reviewed and cited by different international organizations to trace this multilateral policy and legal development. First, the need to redesign the global governance architecture has been highlighted, while global health experts all agreed that the WHO has played a vital role in responding to the COVID-19 pandemic (GPMB, 2019, 2020, 2021; IHR-RC, 2021; IPPPR, 2021a). However, there have been different ideas regarding the most appropriate and feasible design for pandemic governance. The unsolved questions include, for example, whether it was necessary to bring in the United Nations (UN) in response to a pandemic to obtain higher-level political will and attention (Yamin et al., 2021); whether it was necessary to include a

mechanism for sharing virus samples and the scientific and social benefits from related research in such a governance structure; and to what extent a state should concede its sovereign right to the authority and capacity of the WHO.

Secondly, there has been a pressing need to strengthen the IHR 2005. In the face of the COVID-19 pandemic, the IHR 2005—the legal framework for outbreak control adopted more than 15 years ago—seemed outdated (Duff et al., 2021; Yamin et al., 2021). It was generally believed that the IHR had been a well-designed tool; yet it was not fully complied with and hence improperly implemented because no accountability system had been established (IHR-RC, 2021). Namely, the lack of "teeth" has long been identified as a significant shortcoming of the IHR 2005 (Fidler & Gostin, 2006). The fact that the IHR was underperforming is not because it is, in and of itself, a "bad" framework, but mainly because it has not been observed due to certain lacunae left by the states.

Before the pandemic treaty was adopted, a strong connection between the new instrument and the IHR and other related tools, such as the Joint External Evaluation (JEE) for the IHR, was urged (Fukuda-Parr et al., 2021; Razavi et al., 2021). However, there was no consensus on how to make the IHR 2005 work better. Proposals focused on strengthening state compliance through, for example, establishing a compliance committee, or other implementation standards, dispute settlement institutions, and providing incentives and penalties (Blinken & Becerra, 2021; Wenham et al., 2021). States should have adhered to the outbreak governing framework and assigned power to the global health governing bodies. Just as the IHR 2005 failed to provide the anticipated accountability mechanism after the 2003 severe acute respiratory syndrome (SARS) outbreak, a new treaty would not warrant progress if it were not given stronger arms.

Thirdly, more flexible funding for the WHO to deal with a pandemic is also required. The devastating 2014 Ebola outbreak led to the establishment of several outbreak-governing initiatives, such as the World Bank Pandemic Emergency Financing Facility (PEF) and the WHO Contingency Fund for Emergencies (CFE). However, most of these initiatives have been underfunded (Abe et al., 2019; Ravi et al., 2019). The COVID-19 Solidarity Response Fund, created in 2020 by the WHO and the UN Foundation, repeated the unmet funding target. With a target of raising US$ 1.96 billion in 2021, it fell short by US$ 645 million (32.9%) by the end of 2021 (WHO, 2021). Their dependence on voluntary donations has limited these initiatives' efficiency (Wenham et al., 2021). Underlying this phenomenon has been the reluctance of states to fully entrust resources to global health governing bodies, which cannot live up to their expectations.

Besides receiving funding, the other side is where and how such funding is managed. At its inception, the World Bank PEF, the "pandemic bond," was hailed as a "momentous step that has the potential to save millions of lives" (WB, 2017). Its convoluted trigger process was harshly criticized during the COVID-19's peak, leading the Bank to abandon the project (Wenham et al., 2021). As the largest funder for global health within the UN system and the second largest overall (Sridhar et al., 2017), the World Bank, along with the International Monetary Fund, received critiques regarding they are attaching their financial aid to conditions that impact national health investments in

the long run (Kentikelenis et al., 2020). Thus, a more robust new pandemic governing framework will require stable financial commitments and accountability mechanisms to meet these commitments promptly. Reforming the pandemic governing structure must assume the daunting task of creating a more sustainable financing mechanism that relies less on states' fluctuating and unreliable will and allows the resources to be managed by an accountable entity.

Fourthly, equitable access to preventive and healthcare resources has always been emphasized. While the world broke the record for the fastest vaccine development in history in the global response to COVID-19, the unfair distribution of vaccines and diagnostics, as well as other necessary drugs and personal protective equipment, was a challenge that could not be ignored. The new governance framework aims to ensure equity between states and between the communities in a country regarding capacity building, medical resources, and epidemic prevention tools (IPPPR, 2021b; WGPR, 2021c). Relatedly, keeping the private sector in check is important for contemporary global health governance, in which corporate interests should not override global health goals, as exposed in the COVID-19 pandemic.

Fifthly, an integrated health framework was called for in response to the considerations about incorporating concepts such as "One Health" or "Planetary Health" into infectious disease monitoring and control efforts. Viewing the linkages between animal, plant, and human health from a holistic perspective has long been advocated, but it wasn't taken seriously until recently. The COVID-19 pandemic highlighted that the scope of disease monitoring has gone beyond human beings and that environmental and animal health must be considered (Gostin et al., 2021b). Nevertheless, the lack of cross-domain collaboration and experience concerns One Health in practice; whether it should be implemented at the UN, regional, or state level remains unresolved by the Pandemic Agreement.

Lastly, a system for rapid risk assessment, warning, and response must be established. The IPPPR pointed out that "February 2020 was a lost month" (IPPPR, 2021b). Following the announcement that COVID-19 was a public health emergency of international concern (PHEIC) at the end of January 2020, national governments did not take adequate and immediate action. Debates between global health experts consider the lack of nuance and clarity of the PHEIC classification, and thus the vagueness of the follow-up guidance, which caused states not to pay enough attention to the outbreak. In addition, the virus origin investigation that has attracted much attention has also highlighted the challenges to the WHO experts' authority to enter states to conduct independent inquiries. However, despite the new treaty, no conclusion has been drawn regarding the balance between giving the WHO explicit investigative power and encouraging states to share information.

Promoting States' Compliance and Market Regulation

Despite its normative ambition, the Pandemic Agreement leaves considerable discretion to states. For example, a rarely seen preambular clause emphasizes "the sovereign prerogative of each State to consider the WHO Pandemic Agreement in

accordance with its constitutional processes." This is further evidenced by the political tensions surrounding the negotiation process: the US ultimately declined to endorse the final agreement under the Trump administration, citing concerns over national sovereignty and pandemic response autonomy, although the Biden administration was the one who initiated the conversation (Lee, 2023). These developments underscore the enduring friction between collective global action and state-based exceptionalism—a theme that echoes earlier critiques of WHO's limited authority in the IHR framework.

Regarding the thematic concerns mentioned above, the second Special Session of the WHA adopted Decision SSA2(5), *The World Together*, on 1 December 2021 to commence an intergovernmental negotiation over amending the IHR 2005 and/or making a new pandemic treaty. Focusing on adjustments to the IHR had its benefits, including health authorities' familiarity with the rules, the "revisability" of resolution-based regulations, and their temporal efficiency, thus saving time for promoting political commitments. Yet, the limitations and weaknesses concerning the legal basis, the scope of application, and compliance and dispute settlement mechanisms of the current IHR remained largely unaddressed (Gostin et al., 2021b).

Pursuing a new instrument, especially in the form of a treaty, on the other hand, might generate a more transparent governance structure—about legitimacy, equity, and sustainable financing and workforce—and a more accountable system for early warning and response based on the law of treaties (Lee & Yeh, 2022; Toebes, 2015). Yet, concerns were also raised about the time and resources needed for blueprinting and negotiation, precisely because of the stricter binding nature of a treaty (Nikogosian, 2021; WGPR, 2021b). Not all states were keen to have a new binding international legal instrument, especially considering the risk of deadlocks (Frieden & Buissonnière, 2021), potential conflicts between the new treaty and other international legal obligations, and the fact that the WHO may not have the capacity to enforce new rules and standards (WGPR, 2021c).

In any scenario, the world must face the critical issues regarding state responsibility arising from (non-)compliance with legal rules. Taking the IHR 2005 and related mechanisms as an example, this section provides more details regarding the problems surrounding the monitoring and funding of the global pandemic response system. Recalling the revision of the IHR in 2004, the older version of 1969 had long been considered outdated and unable to address the rapid transboundary transmission of emerging infectious diseases since the end of the Cold War (Gostin et al., 2015). As a critical response to the shock of the 2003 SARS outbreak in China and the 2001 anthrax attacks in the US, the WHA also formed an Intergovernmental Working Group, which was tasked with ensuring political commitment to the negotiations over revising the IHR (Fidler & Gostin, 2006; Whelan, 2008).

The outcome document, the IHR 2005, took an "all-risks" approach that, going beyond particular diseases or categories of disease, has defined PHEIC as broadly as to encompass any event regarded as "extraordinary." The IHR 2005 requires the WHO member states to develop core public health capacities, establish National IHR Focal Points, notify the WHO of any potential PHEIC, and adopt evidence-based disease responses that follow the human rights requirements. The Director-General

has been given new power vis-à-vis their new mandate to coordinate a global response to a PHEIC by receiving and verifying unofficial information and determining a PHEIC (in consultation with an Emergency Committee), and issuing temporary recommendations (Gostin et al., 2015). Since 2007, when the updated version of the IHR entered into force, COVID-19 has been the sixth PHEIC.

Under the IHR 2005, state parties must detect and notify the WHO of outbreak events. However, according to the GPMB, many national governments lack a solid preparedness plan and multi-sectoral coordination from the highest national leadership (GPMB, 2019). Many states have also been identified as failing to follow the IHR in reporting immediately, or even as concealing epidemic information within their territories. The dispute settlement mechanisms set up by the IHR were not functioning, while the IHR lacked enforcement mechanisms to ensure compliance (WGPR, 2021b). In this regard, the IPPPR has also persistently called for establishing a Global Health Threats Council, which shall be mandated with top-level political leadership through coordinating health-related UN mechanisms and, therefore, pursuing accountability for decision-making (IPPPR, 2021a; WGPR, 2021a, e).

The IOAC, established as part of the WHO's effort to reform health emergency governance, also noted the lack of enforcement mechanisms in the IHR (IOAC, 2020b), pointing out that "while binding on member states, the IHR 2005 does not provide the WHO Secretariat with authority to impose sanctions on countries for non-compliance" (IOAC, 2020a). Stricter compliance with the provisions of the IHR, coupled with stronger international solidarity, is of the utmost importance in facing future threats. The IHR-RC, convened in September 2020, also concluded that, while the design of the IHR fits its aim, its weakness lies in its implementation, and the responsibility for implementing the IHR should be borne by the highest level of member states (IHR-RC, 2021).

Without question, the enforcement mechanism for and the implementation of the IHR has become a topical problem related to renovating the pandemic response regime, since the IOAC and IHR-RC, as well as the GPMB and IPPPR, have all touched upon this issue (GPMB, 2020; IPPPR, 2021b). Compared to the IPPPR and GPMB, which demonstrated more interest in making a new pandemic treaty, the IOAC and IHR-RC had been relatively reserved on this matter. Yet, it might not be surprising that both the IOAC and IHR-RC, which were born from the WHO's organizational structure, defended the authority of the WHO and urged member states to strengthen their compliance with existing legal frameworks.

The Working Group on Strengthening WHO Preparedness and Response to Health Emergencies (WGPR) identified creating compliance mechanisms for the IHR as one of the overarching topics, concluding that nearly 70% of its recommendations can be implemented through the WHO's regular technical work or by building on existing frameworks (WGPR, 2021c). Strengthening the authority and independence of the WHO and developing new legal instruments were seen as pivotal to the structural transformation as required (Gostin et al., 2021a; WGPR, 2021d). In this respect, the IPPPR Background papers 11 and 16 have drawn on,

respectively, the international human rights principles and the framework convention model in addressing climate change to inform the normative foundations and practical options for multilateral legal responses to pandemics (de Mesquita et al., 2021; Phelan & Pillai, 2021).

In addition to monitoring states' implementation of global rules, the regulation of the private sector has long been an unneglectable issue in global health governance. It would not be an overstatement to say that we live in an age where public-private partnerships (PPPs) dominate the stage of global health governance (Spicer et al., 2020). As mentioned earlier, the World Bank PEF's failure is an example of a PPP generating more profits for the private corporations involved than for the supposed recipient states or global public health (Brim & Wenham, 2019). From the perspective of global public goods, researchers have called for substantial intervention from the public sector to avoid an undue impact of the involvement of the private sector on global health policymaking, and research and development priorities (Ciccone, 2010; Smith & MacKellar, 2007).

During the pandemic, the COVAX mechanism, which involves several global health PPPs such as Gavi and the Coalition for Epidemic Preparedness Innovations (CEPI), has been termed the first "super-PPP" (Storeng et al., 2021). Viewing pandemic control as a global public good and incentivizing intellectual property rights-holders not to enforce market exclusivity is important in addressing legal challenges from WTO-related rules, such as the TRIPS Agreement (Hoen et al., 2021). Unfortunately, COVAX has fallen significantly short in meeting its goal of vaccinating the Advanced Market Commitment states, demonstrating that a well-intended mechanism can be hijacked by the interests of vaccine manufacturers and rendered dysfunctional (Mancini et al., 2021). The prevailing voluntary participation model adopted by COVAX (COVID-19 Vaccines Global Access) has afforded the private sector undue power and limited transparency regarding how vaccines were procured and allocated. For example, in agreement with COVAX, vaccine manufacturers and donor states can still sign bilateral contracts on vaccine provision, crowding out the promised vaccine supplies to COVAX.

Therefore, a more effective pandemic governing framework should better regulate the market by improving transparency in the supply chain. In this regard, the Pandemic Agreement introduces several innovations related to equity in access and benefit-sharing. Article 12 outlines a future Annex on Pathogen Access and Benefit-Sharing (PABS), meant to enable timely access to biological materials and ensure fair and equitable sharing of the benefits arising from their use. While the Annex is yet to be finalized, its inclusion in the main text signals a move toward institutionalizing equity through multilateral mechanisms. Further, Articles 10 through 13 commit Parties to building geographically diversified manufacturing capacity, supporting local production of pandemic-related health products, and ensuring the availability of knowledge, technologies, and financing. The emphasis on technology transfer, voluntary licensing, and non-exclusive agreements directly responds to the inequities experienced during the COVID-19 pandemic.

Establishing a Normative Consensus for Global Health

Assuming that international law is useful for governing and promoting global public health, global leaders must address the normative foundation of a global health legal instrument when international consultation and negotiation occur. The institutional design of the IHR 2005 has allowed for the opacity and inconsistency of the work of the Emergency Committee and the Director-General (Mullen et al., 2020). These structural challenges have prevented the system from being trustworthy, equitable, inclusive, and solidaristic (Brazelton, 2021; Sparke & Williams, 2021). Echoing the IPPPR's recommendation, this world needs "a fundamental transformation" aimed at creating "a new system that is coordinated, connected, fast-moving, accountable, just, and equitable" (IPPPR, 2021b). Hence, this chapter argues for the significance of forming a normative consensus for better global health governance.

A new epistemology of global health informed by the ecological perspective and a precautionary and equity-centered approach should underpin the revision of the IHR and the drafting of the pandemic treaty. Central to this is the need to include a "One Health" framework that internalizes ecological, decolonial health imaginaries and addresses the risk posed by the Anthropocene (Baquero et al., 2021; Lee, 2023). It will require substantive collaboration between the WHO, the World Organisation for Animal Health, and other environmental agencies. It will also need to adopt a precautionary approach to presuming, for instance, human-to-human, cross-border, and asymptomatic transmission of respiratory illnesses, emphasizing the danger of inaction over inconvenience resulting from overreaction. Two epistemological actions are proposed, as follows.

First, the world should look beyond the focus on perceived "weak" health systems in developing states, which has given the world, especially the Global North, a false sense of security that resulted in delayed national responses (Herrick & Reubi, 2021). Considering the caution needed regarding zoonotic diseases and laboratory biosafety, the existing PHEIC mechanism has been critiqued for emphasizing trade-related over public health concerns and for paying disproportionate attention to "fragile states" while overlooking the bioethical issues in the developed world (Gostin et al., 2021b). In this respect, corresponding verification and investigatory mechanisms, as well as "whistle-blowers" protection for unofficial information providers, should be created, yet remain excluded from the outcome document.

In 2018, the WHO proposed an IHR monitoring and evaluation framework and processes, through which states parties can assess their own IHR core capacities, such as annual reporting and JEE (WHO, 2018). The Global Health Security Index (GHSI)—a joint project developed with Economist Impact and by both the Nuclear Threat Initiative and the Johns Hopkins Center for Health Security—has been another benchmarking system for health security and related IHR capabilities (Bell & Nuzzo, 2021). However, the ranking of states parties drawing on these evaluation systems failed to predict states' performance in the COVID-19 response. For example, the US, which received the best score on the GHSI, has been heavily impacted by the pandemic. Some researchers have commented that ironically "the GHSI is predictive of COVID-19 burden, but in the opposite direction" (Aitken et al., 2020).

Many states could minimize the harm of the pandemic. Still, their political leaders chose short-term political expediency or populism over decisively moving to head off virus transmission. Nonetheless, this phenomenon should not be interpreted as the uselessness of the WHO guidance. For example, Taiwan has been actively engaging in the global health security regime despite being largely excluded from the WHO framework; its "compliance without compliance" has occurred regardless of its continued marginalization from international health organizations (Toebes, 2015). These efforts made Taiwan the 8th state to complete and publish the JEE results (Toner et al., 2017), following an extensive health reform based on the WHO recommendations on pandemic preparedness immediately after the 2003 SARS outbreak. After all, Taiwan did relatively well due to its planned and methodical response to the COVID-19 pandemic.

Secondly, as a theme repeatedly occurring throughout the treaty negotiation process, the world should understand better the "differential vulnerabilities" that exist not only between states but also between regions/communities of a state, considering the diverse landscapes such as islands and mountains, and other confounding factors that affect a health system, such as armed conflicts, natural disasters, and other disease outbreaks (ECLAC, 2021). The understanding of differential vulnerabilities must extend beyond national borders to an intersectional understanding within states, acknowledging how factors like gender, Indigenous culture, socioeconomic status, and geographic isolation (e.g., islands, mountainous regions) uniquely shape health system resilience and access to care. For example, women, often frontline caregivers, faced heightened risks and disproportionate burdens during the pandemic (Jhang & Lee, 2024), while remote Indigenous communities frequently experienced delayed or insufficient public health interventions (McLeod et al., 2020; Sansone et al., 2025).

An effective pandemic framework must demand disaggregated data by these intersecting identities and design targeted interventions—by, for example, establishing mechanisms that ensure resources and support directly reach these most susceptible populations through dedicated funding streams for humanitarian settings or specific provisions for older persons and persons with disabilities, as articulated in the Pandemic Agreement. Furthermore, it demands a re-evaluation of assessment metrics beyond broad national indicators like the Global Health Security Index, which failed to predict localized impacts, to emphasize, instead, community-level preparedness and tailored, context-specific responses. Ensuring inclusiveness—one of the fundamental elements of solidarity—underpins the new normative framework. At the WHA Special Session, Palestine called for its inclusion in the intergovernmental consultation mechanism, to which Israel expressed its objection. In theory, the power of designating and determining a PHEIC in the hands of the WHO has also been disproportionately controlled by powerful member states, despite the increasing influence of non-state actors.

The critical question concerns whether a sense of "true" global solidarity is ethically necessary for realizing global health law, in the form of regulations or a treaty, and eventually facilitating preparedness for and response to emerging infectious diseases (Frenk et al., 2014). Arguably, the power politics, such as the

American and Chinese interests, under the shadow of the state-centrism of modernity/coloniality rooted in the contemporary intergovernmental organizations, have influenced the decision-making based on such a global early alert system (Hoffman, 2010; Hoffman & Silverberg, 2018; Lee & Kao, 2022). Meanwhile, non-state actors—such as philanthropists, corporations, and civil society organizations—have been taking an influential role in global health, and hence the success of the new system will rely on the active and well-regulated engagement of these non-state actors.

Therefore, beyond the security discourse, an equity-centered and human rights-based approach to both global health and global health solidarity is necessary (Abimbola et al., 2021; Lee & Yeh, 2022). In this respect, for WHO member states, epistemologically and politically, re-incentivizing international cooperation in law requires reframing such an act as demonstrating "good global citizenship" rather than being an admission of having poor capacity. Despite the calls for expanding the legibility of contracting parties open to all competent health authorities around the world, it did not happen in the final adopted text of the treaty, in which the idea that non-state actors who have a global health impact should be allowed to participate in, or at least be consulted with, wasn't accepted, either, during the process of refashioning the global pandemic response system.

Based on the new epistemology of global health, the world may not necessarily need a new pandemic treaty if global health institutions and all relevant international organizations follow the recommendations from the agencies mentioned above. However, now we do have one, but the text only partially reflects the required epistemological shift. Following the resolution passed by the Special Session and all these years, will the new Pandemic Agreement address the shortcomings manifested by the bad implementation of the IHR? If the problem of the lack of an enforcement mechanism is not resolved, then the new pandemic treaty may be a redundant instrument (Gostin et al., 2025). Learning from the FCTC and the UN Framework Convention on Climate Change (UNFCCC), the establishment of a treaty and its implementation are two very different things.

The lack of an enforcement mechanism in the IHR was partly due to global health politics. Historically, public health has been perceived as "low politics" that deals with scientific and humanitarian activities through soft power, such as persuasion, public opinion, and negotiation, to encourage individual states to comply with their treaty obligations (Khazatzadeh-Mahani et al., 2018). It is generally believed that by avoiding "naming and shaming," the WHO would facilitate a culture of openness and transparency and encourage information sharing (Lee, 2021). Yet, in recent decades, there has been a trend in which public health issues have been conceptualized as the agenda topic of higher politics with hard power since the introduction of the concept of "global health security" and its application to different crisis events such as HIV/AIDS (Rushton, 2019). COVID-19 seems to have reinforced such a trend.

The Preamble and Article 3 of the Pandemic Agreement explicitly affirm that the principles of equity, the right to health, non-discrimination, and the protection of vulnerable populations should guide the treaty enforcement and implementation.

It identifies various groups to be considered in pandemic preparedness and response: persons in vulnerable situations, Indigenous Peoples, those in humanitarian settings, older persons, and persons with disabilities. This reflects a normative deepening of prior WHO instruments, integrating social justice more fully into the core structure of international health law. Still, whether these principles translate into enforceable rights or remain aspirational within national contexts remains to be scrutinized.

While these legal and institutional reforms mark important efforts to strengthen formal governance structures, their transformative potential is still constrained by prevailing assumptions about sovereignty, risk, and public health. To evaluate the direction and adequacy of these reforms, the world, especially those who suffered from the COVID-19 pandemic the most and the health disparities it exacerbated, must constantly critically interrogate the epistemological foundations upon which global health governance has been built. This includes rethinking what counts as legitimate knowledge, whose interests shape legal norms, and how health risks are defined and distributed across human and non-human communities.

Conclusion

This chapter has considered the epistemological and ethical concerns rooted in the inadequacy and ineffectiveness of global health governance in the face of the COVID-19 pandemic. All the assessment reports identified that it is not a pure accident when an outbreak becomes a pandemic. Many structural barriers to the IHR system's functioning have exposed an international organization's weakness in monitoring, receiving information from, and leveraging outbreak states (Singh et al., 2021). With the new treaty adopted in May 2025 by the WHA, the normative issues have finally been taken seriously and, unfortunately, only partially addressed. The global health community, not to be reduced to the WHO, has a track record of setting up ambitious programs or goals that eventually performed underwhelming outcomes (Fukuda-Parr et al., 2021; Yamin et al., 2021).

Beyond the intergovernmental agencies' reports, academic and diplomatic discussions have revealed the structural and institutional determinants of global health inequities and the lack of international commitments to pandemic preparedness and response. The WHO Pandemic Agreement provides a framework for rethinking pandemic governance, but it remains incomplete without adopting its Annexes and protocols. A complete and more comprehensive transformation is still needed, perhaps through the operationalization and implementation of the Pandemic Agreement, or other approaches in which a novel way of thinking and doing global health is informed by the principle of global solidarity beyond state-centrism (Wenham et al., 2022).

While formal legal instruments offer a scaffold for future cooperation, their realization depends on the political mobilization of actors beyond states. Civil society organizations, regional alliances, and transnational health justice movements have played vital roles in contesting access inequities and demanding accountability, especially during COVID-19. These actors can serve as epistemic challengers and

normative innovators, pushing for solidaristic practices that institutional reforms alone may not achieve. In this evolving context, the Agreement's potential, as well as post-COVID global pandemic governance as a whole, lies not only in its legal form but in its invitation to reimagine global health solidarity as a social problem of justice, trust, and redistribution across borders, disciplines, and lived experiences.

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