

International Dimensions of Infectious Disease Control

Applications to Platform Responsibility

Mark Jit and Dominik K. Hofstetter *

7.1 INTRODUCTION

An online platform can be understood as a digital service that facilitates interactions such as the transmission of information between multiple distinct but interdependent sets of users who interact through the platforms.¹ While the terminology of platforms commonly refers to the online media space, platforms can also exist elsewhere. Indeed, there are striking analogies to the field of infectious disease epidemiology. In this space, infections are analogous to information that can be spread from person to person, while routes of transmission (such as aerosols, food, and sexual contact) are analogous to online platforms that spread information. The spread of information more generally, which includes disinformation, misinformation, and other harmful content,² on online platforms and the spread of infectious agents through transmission routes both require a source and a target, and both spread faster the more people are “infected.” Information thus thrives, much like infectious diseases, from a platform’s greater reach.

* We would like to express particular thanks to the editors, Joel P. Trachtman and Bhaskar Chakravorti, for their initiative, guidance, and comments.

¹ See OECD, What Is an “Online Platform”?, An Introduction to Online Platforms and Their Role in the Digital Transformation 19 (2019), <https://www.oecd-ilibrary.org/content/compend/19e6a0fo-en> (last visited Jan. 2, 2024).

² For the purposes of this chapter, misinformation is false or inaccurate information that is spread, regardless of an intent to mislead, while disinformation is misinformation that is intentionally spread (see, e.g., *Topic: Misinformation and Disinformation*, AMERICAN PSYCHOLOGICAL ASSOCIATION, <https://www.apa.org/topics/journalism-facts/misinformation-disinformation> (last visited Dec. 27, 2023); *Misinformation versus Disinformation, Explained*, THE FOUNDATION FOR INDIVIDUAL RIGHTS AND EXPRESSION, <https://www.thefire.org/research-learn/misinformation-versus-disinformation-explained> (last visited Dec. 27, 2023). Both categories of information, as well as further harmful online content, all bear risks for users of online platforms and societies at large, as is the case with infectious disease agents.

The key difference is that infections require physical proximity or intersections between individuals or routes of transmission to spread, while information can spread electronically from afar. These are not new concepts; analytical models of information spreading like an infection date back at least to the 1950s.³

Like information disseminated through online platforms, infectious diseases can cross international borders as they track the movement of people (and sometimes animals and goods). Hence, their control and management have major implications for international relations, and international law. An example is the continuing COVID-19 pandemic, the largest recent global infectious disease-related crisis in terms of both health and economic impact. It has had profound effects on international travel, trade, migration, and political relations, some of which are likely to have long-term implications.⁴ Yet COVID-19 is only one of a series of major international infectious disease threats over the last few decades that have shaped the international political, economic and legal framework related to global health. In 2005, following the 2002–2004 severe acute respiratory syndrome (SARS) outbreak, the World Health Organization (WHO) revised its international health regulations (IHR) to allow for the declaration of a public health emergency of international concern (PHEIC): “an extraordinary event which is determined . . . to constitute a public health risk to other States through the international spread of disease and . . . to potentially require a coordinated international response.”⁵ Since then, the WHO has declared a PHEIC six times: in 2009 (influenza A/H1N1), twice in 2014 (polio and Ebola), in 2015 (Zika), in 2018 (Ebola), and in 2020 (SARS-CoV-2).

Pandemics are usually triggered by a spillover event, during which a pathogen is transmitted from an animal reservoir population to a human host, and subsequently adapts to efficient transmission within human populations, as was the case for influenza pandemics as well as SARS and SARS-CoV-2. Such spillover events may happen increasingly frequently due to climate change, biodiversity loss, and encroachment of human settlements on animal habitats. Other infectious disease outbreaks may be triggered by the weakening of control measures such as vaccinations and quarantines that have kept infections under control, as a result of internal or external conflict and political unrest. Once an infection emerges, it can spread rapidly across internal and external borders due to global connectivity and travel. A recent example is the measles outbreak in Venezuela sparked by internal political

³ Luís M. A. Bettencourt et al., *The Power of a Good Idea: Quantitative Modeling of the Spread of Ideas from Epidemiological Models*, 364 PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS 513 (2006).

⁴ Packiaraj Thangavel, Pramod Pathak & Bibhas Chandra, *Covid-19: Globalization – Will the Course Change?*, 26 VISION 7 (2022).

⁵ Article 1, WORLD HEALTH ORGANIZATION, *INTERNATIONAL HEALTH REGULATIONS. THIRD EDITION* (2005), <https://www.who.int/publications-detail-redirect/9789241580496> (last visited Jan. 2, 2024).

and economic turmoil,⁶ which in turn spread to neighboring parts of Brazil and led to the reversal of a hard-won certification of measles elimination in the Americas.

The periodic occurrence of pandemic events has shed a spotlight on the functioning of the legal and regulatory framework at play in global health and infectious disease control, at both domestic and international levels. While the necessity and relative benefits of international coordination may have been evident for a long time, regulatory fragmentation, lack of implementation of international agreements on the domestic level, and disagreement on the allocation of resources appear to shape current pandemic responses across the globe. The primary instrument in the global health repertoire is the IHR administered by the WHO, which provides a platform for multi-country cooperation in infectious disease control. The IHR is meant to provide the international community with an overarching legal framework that defines Member States' rights and obligations in handling public health events and emergencies that have the potential to cross borders.⁷

Drawing on the analogy between the spread of infectious diseases and the spread of information across online platforms, this chapter looks to lessons from global health governance to formulate suggestions for the governance of online platforms and their content moderation practices.

To this end, we will first examine the rationale for international cooperation in infectious disease control, as well as review the history of the global health governance framework and uses of the IHR during the COVID-19 pandemic and previous PHEICs. We will then assess the suitability of the IHR and current global health governance framework in controlling the "platforms" of transmission. Finally, we return to our analogy with online platforms and rely upon lessons from the infectious disease control space, to formulate recommendations for the global governance of online platforms.

7.2 RATIONALES FOR MULTILATERAL COOPERATION IN INTERNATIONAL INFECTIOUS DISEASE CONTROL

An early shared recognition of the need for States to cooperate beyond their national borders in identifying, preventing, and controlling infectious disease outbreaks has largely shaped the current governance framework around international health and, more specifically, infectious disease control. While rationales for cooperation in this area have notable historical origins dating back to the nineteenth century, this

⁶ Alberto E. Paniz-Mondolfi et al., *Resurgence of Vaccine-Preventable Diseases in Venezuela as a Regional Public Health Threat in the Americas*, 25 EMERG. INFECT. DIS. 625 (2019).

⁷ See Article 2 International Health Regulations (2005) Third Edition [hereinafter IHR] providing, "the purpose and scope of these Regulations are to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade."

chapter will emphasize the contemporary rationale for multilateral cooperation, best expressed in the language of externalities.

7.2.1 *Historical Origins of Cooperation in Infectious Disease Control*

The similarities in the context and mechanisms of transmission between infectious diseases, on the one hand, and information across platforms, on the other, are reflected historically. Indeed, the history of public health and infectious disease control from an international perspective finds one of its earliest links in the history of the International Sanitary Conferences (ISCs) that took place between 1851 and 1938. The catalyst for these ISCs was a growing awareness of the global spread of diseases and the need for coordinated responses.

At the time of the first ISC in 1851, the transmission of diseases between distant places was not a new phenomenon in the dismal and overcrowded conditions of the industrial revolution. However, technological advances and the revolution in transportation at the time allowed diseases to suddenly travel at an unprecedented speed.⁸ The speed and volume of international travel has continued to increase exponentially since then. The effect of this was particularly evident throughout the COVID-19 pandemic and the remarkable speed at which an initial outbreak in Wuhan was able to reach countries around the world within days.

The substantial increase in the speed of transmission of infectious disease can be likened to the unparalleled speed at which information nowadays spreads across online platforms. Various studies have assessed the parameters that influence the volume and speed of this online information spread.⁹ For instance, negative information (e.g., in tweets) appears to spread faster than positive or neutral information.¹⁰ Moreover, information transmission patterns in the aftermath of an emergency or crisis event demonstrate the differences between information transmission routes (e.g., mobile phone data vs. tweets) and the information (and misinformation) that can be spread through each transmission route.¹¹ The evolution of online information spread tracks the analogous developments that led to

⁸ Valeska Huber, *The Unification of the Globe by Disease? The International Sanitary Conferences on Cholera, 1851–1894*, 49 HIST. J. 453, 455 (2006); WORLD HEALTH ORGANIZATION, *The First Ten Years of the World Health Organization* (1958).

⁹ See overview in, Didier Henry, Erick Stattner & Martine Collard, Information Propagation Routes between Countries in Social Media, COMPANION OF THE WEB CONFERENCE 2018 ON THE WEB CONFERENCE 2018 – WWW '18 1295 (2018), <http://dl.acm.org/citation.cfm?doid=3184558.3191569> (last visited Jan. 5, 2024).

¹⁰ See Nasir Naveed et al., *Bad News Travel Fast: A Content-Based Analysis of Interestingness on Twitter*, PROCEEDINGS OF THE 3RD INTERNATIONAL WEB SCIENCE CONFERENCE 1 (2011), <https://dl.acm.org/doi/10.1145/2527031.2527052> (last visited Jan. 5, 2024).

¹¹ See, e.g., James P. Bagrow, Information Spreading during Emergencies and Anomalous Events, Complex Spreading Phenomena in Social Systems 269 (Sune Lehmann & Yong-Yeol Ahn, eds. 2018), http://link.springer.com/10.1007/978-3-319-77332-2_15 (last visited Jan. 5, 2024).

rapid and wide infectious disease spread in the nineteenth century. An identical awareness of the risks of a rapid spread of infectious disease is thus necessary in the online information space.

While awareness of the risk of infectious disease spread grew, participants at the first ISC disagreed on the specifics of infectious disease control. For instance, most doctors involved at the first ISC agreed that cholera was a problem that transcended national boundaries and that international cooperation was thus needed to tackle it. If both cholera and its prevention were international concerns, a solution could thus not come about on a solely national basis.¹² Despite vague agreement on the need for collective action, disagreement on the causes of infectious diseases and suitable control mechanisms posed insurmountable barriers to actual international agreement at the ISCs for many years to come.¹³ With regard to online platforms, representatives from most countries would likely agree that certain forms of online information (e.g., dis- and misinformation or harmful content) pose considerable risks and challenges for their societies. At the same time, much like with early disagreements at the first ISC, properly defining what each country considers to be such harmful content, and then deciding on how to combat this, may at first appear to be an impossible task.

And yet the earliest ISCs offer hope if we can consider them as attempts at an internationalization of global health governance. They provided a forum for the management of differences, between different countries and different scientific stances, but also, they would later evolve into the main platforms for discourse and gradual harmonization and standardization in this field.¹⁴ So, while an international forum that addresses the risks that come with the spread of harmful content online may at first not appear a feasible endeavor, it may lay the foundation for internationalization, harmonization, or, at the very least, international (and high-level) discussions on the matter.

7.2.2 Contemporary Rationales for Multilateral Cooperation

The motivation for multilateral cooperation in infectious disease regulation has only strengthened since the initial and rudimentary desire to create an international forum to discuss global health, particularly with the creation of the WHO and increasing interconnectedness of the globe. It can best be described in the economic language of externalities.¹⁵ Externalities are benefits or costs of an activity that fall on third parties. For instance, externalities involved in goods transactions do not fall on either producers or consumers of the good. Here, we are particularly interested in inter-countries externalities that fall on populations of third countries.

¹² Huber, *supra* note 8, at 457.

¹³ See Norman Howard-Jones, *The Scientific Background of the International Sanitary Conferences* (1975), 99.

¹⁴ See, e.g., HOWARD-JONES, *supra* note 13; WORLD HEALTH ORGANIZATION, *supra* note 8.

¹⁵ Mark Jit et al., *Multi-Country Collaboration in Responding to Global Infectious Disease Threats: Lessons for Europe from the COVID-19 Pandemic*, 9 THE LANCET REGIONAL HEALTH – EUROPE 100221 (2021).

Positive externalities involve benefits falling on third parties. For instance, activities to control infection in one country (such as vaccination and quarantine) can also prevent spread to others. The best example is eradication of an infectious disease, which requires cooperation of every country in the world before any country can enjoy the full benefits. Similarly, control of an infection at its source can save considerable resources in controlling it after it has spread to other countries. Economists have also proposed the concept of the “caring externality” – people appreciate and derive utility from knowing that other people (including those in other countries) are living healthy lives.¹⁶

However, negative externalities can also occur in infectious disease control. For instance, during a pandemic there may be a limited supply of goods needed to prevent and treat illness (such as vaccines, antivirals, and personal protective equipment), so consumption of these goods by one country reduces supply and raises prices for others. Countries may respond to the identification of a pathogen in a country by curtailing international travel from that country, which may have negative economic consequences on the country. Consumption of antibiotics may help prevent bacterial infections but may also cause antibiotic resistance, a global negative externality.

In the absence of externalities, individuals or countries acting in their own self-interest will achieve the most globally efficient outcome, though not necessarily the most equitable. This is usually no longer the case when externalities are incorporated. So, at least in theory, multilateral collaboration can seek “win-win” cooperative optimum conditions across actors and countries and thus can enhance global welfare. Indeed, essential determinants of global health (e.g., pathogens, air, food, and water) are not solely confined to national borders. Instead, threats to these determinants can spread to adjacent countries, regions, and even continents. Controlling the determinants of global health can thus only be achieved by international cooperation and global governance.

The same language of externalities can be applied to the spread of information through online routes of transmission. The benefits from one state’s attempts to control harmful content may be reaped by many other countries. That being said, since such content may originate in any country and then spread “virally” across the globe, its “eradication” would require the cooperation of every country in which such information or content may be hosted. Moreover, as with infectious disease agents, controlling or preventing the creation or spread of dis- and misinformation and harmful content at its source would likely free up considerable content moderation and law enforcement resources in the other affected countries. On the other hand, negative externalities may be observed in instances where private enterprises, that is, online platforms, have limited content moderation resources to commit to controlling harmful content. If an online platform commits such resources to one

¹⁶ A. J. Culyer, *The Nature of the Commodity “Health Care” and Its Efficient Allocation*, 23 OXFORD ECONOMIC PAPERS 189 (1971).

geographic region, this may come at the expense of a different region, where the shortage of content moderation resources would entail a greater “virality” of the information at issue. Moreover, any efforts at content moderation within one country (or by an intervening third country) inevitably raise free speech concerns. Thus, when applied to the spread of information online, the language of externalities describes a strikingly similar picture as with infectious diseases.

7.3 MECHANISMS OF REGULATORY CONTROL

Several types of multilateral interventions involve regulatory control. The most obvious category is “command and control regulations” that prohibit activities with negative externalities (such as international travel) or mandate activities with positive externalities (such as vaccination). Regulatory regimes could include alignment of national regulations on private actors, such as regulating sales of medical interventions by private manufacturers and regulating movement by individuals.

Such regulations could be replaced with “Pigouvian” taxes and subsidies. Resource pooling can be thought of as a type of Pigouvian tax/subsidy – that is, a financial transfer from the beneficiaries to the producer of a positive externality (subsidy) or from the producer to the victims of a negative externality (tax). Examples of positive externalities that may be deemed worthy of a subsidy could include herd protection from vaccination, caring externalities to achieve greater equity, and economies of scale when countries collaborate to produce sufficient supplies of medical equipment.

The IHR provide a common framework and broad guidelines to implement such control regulations and Pigouvian taxes. Namely, the IHR provide guidelines on interventions at points of entry (Part IV), the design of public health measures (Parts V and VIII), standards for health documents (Part VI), and permissible charges (Part VII). The guidelines account for a state’s desire to implement measures it deems necessary while emphasizing the need to prevent negative externalities and reinforce positive ones. State parties’ agreement on the IHR can be understood as the States’ recognition of the benefits of multilateral coordination in devising measures to detect, contain, and prevent infectious diseases.

7.3.1 *Evaluating the International Framework on Infectious Disease Control*

As previously outlined, the first ISC was convened in Paris in 1851.¹⁷ While most representatives disagreed on the cause of cholera and the best methods of disease prevention, subsequent iterations of these conferences finally led to the 1892 adoption of the International Sanitary Convention on the control of cholera and the

¹⁷ Michael McCarthy, *A Brief History of the World Health Organization*, 360 THE LANCET 1111 (2002); See also, N. Howard-Jones, *The World Health Organization in Historical Perspective*, 24 PERSPECTIVES IN BIOLOGY AND MEDICINE 467 (1981).

1897 convention that addressed the plague. While international health governance was initially fragmented across a number of regional organizations, the 1945 UN Conference on International Organizations in San Francisco voted to establish a new international health organization and only a year later the International Health Conference in New York approved the Constitution of the WHO. Since its coming into force in 1948, the WHO largely guided by its Constitution and decisions of its principal body, the World Health Assembly, was involved in wide-ranging disease prevention and control efforts across the globe.

As a governance forum, States provided the WHO with a number of authorities to develop global health law. The World Health Assembly, which consists of delegates of WHO Member States, has in turn codified evolving regulations to coordinate international action to prevent, detect, and respond to pandemic threats. Specifically, the WHO constitution provides the WHO with authority to develop international law on public health matters by adopting conventions (Article 19), regulations (Article 21), and recommendations (Article 23). Despite these vast authorities, the WHO has been reluctant to exercise its Article 19 authority and has instead made use of Article 21 in formulating the IHR to address infectious disease control. This in turn left a number of global health threats unaddressed.¹⁸

The IHR, adopted as an Article 21 regulation containing legally binding standards that designate specific actions that must be taken by Member States and provide the primary legal agreement relating to the threat of infectious diseases. Beyond these binding standards, certain States have also negotiated nonbinding frameworks to advance aspects of health security. The Pandemic Influenza Preparedness (PIP) Framework enables better coordination of international information and research sharing for pandemic influenza strains, by bringing together the WHO, Member States, and non-state actors, such as pharmaceutical companies.

The governance of infectious disease control is also informed in part by the practices of the WHO's constituent bodies. As the principal decision-making body of the WHO, the World Health Assembly serves as the "norm-creator".¹⁹ The WHO Executive Board, the Secretariat, the Director-General, the Emergency Committee, and the WHO Regional Organizations all serve to contribute to expedient and efficacious decision-making in times of health emergencies. The bodies broaden the involved expertise and voices beyond those represented in the World Health Assembly and introduce technical expertise. Thus, the practice and the degree to which these bodies are considered to be acting within or without their constitutional mandates informs the success and legitimacy of the global health law framework as a model for international governance.

¹⁸ Benjamin Mason Meier et al., *The World Health Organization in Global Health Law*, 48 J. LAW. MED. ETHICS 796, 797 (2020).

¹⁹ Pedro A Villarreal, *The World Health Organization's Governance Framework in Disease Outbreaks: A Legal Perspective*, *The Governance of Disease Outbreaks: International Health Law: Lessons from the Ebola Crisis and Beyond* 263 (2017).

Despite the existing norms and framework to address infectious diseases, countries acted on their own or at best regionally for much of the response to the COVID-19 pandemic, from border control to vaccine distribution. This has led to calls for and negotiations surrounding a pandemic treaty.²⁰ In the wake of the COVID-19 pandemic and increasing risk factors for future pandemics, there is a need to assess whether the current international regulatory regime is fit for purpose and sufficient. Early proposals for a pandemic treaty²¹ recognized gaps in the scope of the IHR, specifically as it relates to the production of and access to necessary equipment, medicines, and vaccines. Moreover, unlike the IHR, a pandemic treaty could aim primarily at preventing the outbreak of the next pandemic, rather than solely responding to an existing outbreak.²² These calls were underlined by the Independent Panel on Pandemic Preparedness and Response (IPPPR) appointed by the WHO Director-General, to examine how COVID-19 became a global health crisis. In a background paper on the international law relating to pandemic preparedness, the IPPPR found that a “Framework Convention – Protocol approach” could allow for the most beneficial governance reforms of the existing system.²³

Such an agreement has been in the works since the end of 2021, and on October 16, 2023, the world received a first glimpse of the complete draft negotiating text. Most recently in November 2023, the 194 Member States of the WHO began deliberating on the concrete text in Geneva. The discussions on the draft pandemic treaty highlight the differences in States’ positions, which often reflect differences in capacities and resources to identify and respond to disease outbreaks. For example, while industrialized countries want to focus more on prevention and information-sharing, developing countries emphasize the need for equitable access to vaccinations, medicines, and other resources to form the core of such a Pandemic treaty. As is usually the case at the WHO, any agreement will need to be reached by consensus. The question of whether States will agree on working toward resilient health systems, benefit sharing, outbreak surveillance cooperation, and equitable sharing of resources thus depends on States’ willingness and ability to strike compromises.²⁴

²⁰ John Zarocostas, *Countries Prepare for Pandemic Treaty Decision*, THE LANCET, Nov. 27, 2021, at 1951.

²¹ Ironically, the content of a potential pandemic treaty has been the subject of substantial dis- and misinformation on various online platforms. The disinformation includes claims that the treaty would threaten national sovereignty and that the WHO could deploy troops to enforce vaccine mandates and digital passports. While all of these claims have been authoritatively debunked, their spread has sowed public mistrust toward any such pandemic accord (see Ahmed Soliman et al., *WHO Pandemic Accord: Full Adherence to the Principle of Sovereignty*, 402 THE LANCET 1322 [2023]).

²² Jorge Vinuales et al., *A Global Pandemic Treaty Should Aim for Deep Prevention*, 397 THE LANCET 1791 (2021).

²³ Alexandra Phelan & Priya Pillai, *International Health Law in Perspective – Background Paper* 16 (2021).

²⁴ Kerry Cullinan, *Draft Pandemic Accord: IP Waivers And Benefits For Sharing Pathogen Information Are In – For Now* (Oct. 17, 2023), <https://healthpolicy-watch.news/draft-pan>

7.3.2 *An International Framework to Provide Guidelines for Platform Responsibility*

In the infectious disease control space, the IHR provide a common framework and broad guidelines for States to realize various regulatory goals. Likewise, the online platform space could benefit from a multilateral instrument that could provide broad guidelines for States to consider when attempting to establish or adapt rules relating to platform responsibility. As in the infectious disease space, guidelines that fulfill the role of a framework agreement could account for a State's desire to implement measures it deems necessary while emphasizing the need to prevent negative externalities and reinforce positive ones. State parties' agreement on a multilateral instrument could, similar to the infectious disease space, be understood as the participating States' recognition of the benefits of multilateral coordination in devising measures to detect, contain, and prevent the spread of dis- and misinformation and other harmful content. That being said, the feasibility of such a multilateral agreement is a question that hinges on the prospect of reconciling the interests of the various actors in the online platform space.

7.3.3 *Key Actors in International Coordination Mechanisms*

International cooperation around infectious diseases relies on cooperation between multiple public and private actors to agree and implement mechanisms for coordination. Historically, the key platforms have been inter-governmental, with the WHO playing the leading role in setting international norms and standards on health. While the WHO has extensive technical and field staff, its decision-making is vested in the World Health Assembly, an annual forum in which each WHO Member State has an equal vote.

However, the WHO faces multiple challenges to playing this leadership role. The greatest challenge is financial. The WHO's budget from membership dues has steadily declined in real terms since the 1990s, so it is increasingly reliant on voluntary contributions from governments and private donors.²⁵ This creates a situation where the WHO's agenda can be largely dictated by external donors, which limits its strategic maneuverability and its ability to lead initiatives that require large financial resources.²⁶ A second challenge is that while the World Health Assembly has a mandate to set global health standards, it lacks legal mechanisms to enforce compliance. Indeed, neither the WHO Constitution, nor any specific

[demicaccord-ip-waivers-and-benefits-for-sharing-pathogen-information-are-in-for-now/](#) (last visited Jan. 3, 2024).

²⁵ Srikanth K. Reddy, Sumaira Mazhar & Raphael Lencucha, *The Financial Sustainability of the World Health Organization and the Political Economy of Global Health Governance: A Review of Funding Proposals*, 14 GLOBALIZATION AND HEALTH 119 (2018).

²⁶ Villarreal, *supra* note 19, at 267–68.

agreements such as the IHR or framework agreements such as the WHO Framework Convention on Tobacco Control (FCTC) contain provisions granting investigation or enforcement powers to any WHO body, nor any equity obligations.²⁷

Even the proposed text of the pandemic treaty lacks proper commitment to an independent accountability mechanism designed to promote compliance with its content. The pandemic agreement draft does contain commitments on States' self-reporting on their pandemic prevention, preparedness, and response efforts. However while the Conference of the Parties, made up of State delegates that govern the agreement's implementation, has reserved the option to assemble an "implementation and compliance committee," some have argued that even this language falls short of what would be required to hold States accountable and achieve treaty compliance.²⁸

Consequently, the global health governance space created by the WHO's limitations is filled by a range of government-linked and private actors. These range from initiatives from individual countries (e.g., the United States President's Emergency Plan For AIDS Relief or PEPFAR), to charities associated with individuals (e.g., the Bill & Melinda Gates Foundation), to nongovernmental organizations (e.g., Médecins Sans Frontières), to public-private partnerships (e.g., Gavi, the Vaccine Alliance), to for-profit organizations (e.g., pharmaceutical companies and health consultancies).²⁹

These actors shape international cooperation around infectious diseases through the interaction of their complementary and conflicting objectives. Most of these actors ostensibly have a common objective of improving health. For the WHO, this objective is explicitly stated in Article 1 of its constitution,³⁰ although as stated, the WHO is ultimately governed by national actors who may pursue different objectives. Nonprofit actors like health charities also pursue this goal but often within more narrow arenas, for example, improving vaccine uptake or reducing HIV burden globally. Furthermore, many of these actors at least in theory take leadership from

²⁷ The IHR Review Committee on COVID-19 notably concluded that while the IHR were not deficient, strong accountability and enforcement mechanisms would have been necessary, as IHR implementation by States and by the WHO throughout the COVID-19 pandemic was lacking (Preben Aavitsland et al., *Functioning of the International Health Regulations during the COVID-19 Pandemic*, 398 THE LANCET 1283 [2021]).

²⁸ Susanna Lehtimäki et al., *Where There Is a Will, There Is a Way: Independent Assessment of Member State Compliance with the Pandemic Agreement*, 12 THE LANCET GLOBAL HEALTH e18 (2024).

²⁹ Jeremy Youde, CONTEMPORARY GLOBAL HEALTH GOVERNANCE ACTORS, Global Health Governance in International Society (Jeremy Youde, ed. 2018), <https://doi.org/10.1093/oso/9780198813057.003.0005> (last visited January 7, 2024); Benjamin Mason Meier & Matiangai V. S. Sirleaf, *Global Health Landscape: The Proliferating Actors Influencing Global Health Governance*, Global Health Law & Policy: Ensuring Justice for a Healthier World (2023).

³⁰ World Health Organization, *Constitution of the World Health Organization* (1995), https://apps.who.int/iris/bitstream/handle/10665/121457/em_rc42_cwho_en.pdf (last visited June 29, 2022).

the WHO on technical and normative issues. For instance, Gavi, the Vaccine Alliance, procures and funds vaccines for the world's poorest countries, but candidate vaccines in its portfolio have to first be identified by the WHO. Finally, for-profit actors promote health as a means to an end (revenues from sales of health-related goods). Hence, they have an interest in international norms around infectious disease interventions.³¹

The fragmented landscape of actors in international infectious disease management demonstrates the type of cooperation challenges that attempts at international online platform responsibility governance also face. With regard to online platforms, however, the stated goals of private platform operators and those of public officials and nongovernment organizations in different countries may diverge even more heavily than in the infectious disease space. While private and non-state initiatives in global health benefit from general leadership and technical guidance by the WHO, an equivalent multilateral body with similar standing is clearly missing in the online platform responsibility space. Instead, private corporations will heavily tailor their content moderation practices according to the attitudes and visions of the States that exercise direct or indirect regulatory jurisdiction over their platforms, ultimately further fragmenting the governance landscape for online platforms.

7.4 CHALLENGES AND SOLUTIONS TO ACHIEVING OPTIMUM INTERNATIONAL REGULATORY COOPERATION

Despite the existence of a formal institution charged with global health governance and the IHR, the COVID-19 pandemic brought to light critical flaws that exist in the global health law framework related to infectious diseases.³² It also highlighted the fundamental challenges that prevail when trying to coordinate collective action in global health.

7.4.1 *Challenges to International Regulatory Cooperation*

A primary problem is that individual States may not necessarily benefit from participating in such agreements until all partner States agree to collaborate.

³¹ On the reallocation of the exercise of public authority away from public institutions toward semi public and private entities, in part due to the need for greater resources and functional specialization, *see, e.g.*, Mateja Steinbrück Platise, *The Changing Structure of Global Health Governance, The Governance of Disease Outbreaks*. *International Health Law: Lessons from the Ebola Crisis and Beyond* (2017).

³² For an evaluation of the performance of the IHR during the COVID-19 pandemic, *see, e.g.*, Aavitsland et al., *supra* note 27; Hu Zhang, *Challenges and Approaches of the Global Governance of Public Health Under COVID-19*, 9 *FRONTIERS IN PUBLIC HEALTH* (2021), <https://www.frontiersin.org/article/10.3389/fpubh.2021.727214>; Anne Bucher, George Papaconstantinou & Jean Pisani-Ferry, *The Failure of Global Public Health Governance: A Forensic Analysis*, *BRUEGEL* 18 (2022).

Furthermore, actors (such as politicians) negotiating such agreements for their States may have aims that do not perfectly coincide with even the self-interest of their populations as a whole. Hence, reaching the globally optimal solution may require unreasonable amounts of time and political capital. Such solutions are not easily achieved under the time pressure associated with infectious disease outbreaks, and the urgency of providing resources such as materials, expertise, drugs, and vaccines to populations most in need. Consequently, even if most actors agree, in principle, with its overarching goals, outcomes of international agreements often fall short of achieving optimal solutions. This point is most prominent in critiques of the IHR (and even the proposed pandemic treaty), as they provide aspirational guidelines, but time and again miss the mark in terms of compliance and accountability (Ebola, MERS, COVID-19).³³

A further challenge in engendering international support for multilateral collaboration is that the benefits of such cooperation are often abstract, diffuse, and time-lagged. For instance, internationally agreed travel protocols during a pandemic can strike a balance between protecting the global economy and preventing infection spread. Similarly, agreement to pool medical resources such as drugs and vaccines across countries can enable supplies to be directed to populations at greatest need, as well as contribute to global eradication efforts. However, these aims are less immediate than nationalistic solutions such as closing borders to all infected countries and competing to obtain the greatest share of medical resources.

Finally, even when norms acquire legal standing, international bodies such as the WHO lack mechanisms to create adequate incentives for adherence or sanction noncompliance, beyond the threat of international opprobrium. For example, while the IHR impose a “reciprocal responsibility,” calling on all nations to detect, report, and contain public health threats in ways that are “commensurate with and restricted public health risks, and which avoid unnecessary interference with international traffic and trade,”³⁴ many countries during COVID-19 continued to enforce strong travel restrictions long beyond the point that it was epidemiologically sensible to do so.³⁵ While some consider the IHR’s obligations legally binding, there is much ambiguity and uncertainty as to its enforcement capabilities. The language of the IHR mostly speaks in “shall” terms, which make it difficult to describe a potential breach. Moreover, the consequences of such a breach are not delineated nor is the dispute settlement mechanism apt for potential State-to-State claims that may arise.³⁶

³³ See, e.g., David P. Fidler, *The Case against a Pandemic Treaty* | Think Global Health, COUNCIL ON FOREIGN RELATIONS (2021), <https://www.thinkglobalhealth.org/article/case-against-pandemic-treaty> (last visited Jan. 3, 2024).

³⁴ Art. 2, International Health Regulations.

³⁵ Timothy W. Russell et al., *Effect of Internationally Imported Cases on Internal Spread of COVID-19: A Mathematical Modelling Study*, 6 THE LANCET PUBLIC HEALTH e12 (2021).

³⁶ Susan L. Erikson, *The Limits of the International Health Regulations: Ebola Governance, Regulatory Breach, and the Non-Negotiable Necessity of National Healthcare*, The

This ambiguous framework leads to descriptions of the IHR as empowering the WHO to control and lead the conduct of Member States, all while lacking the power to adopt measures enforceable as law. In other words, the IHR are binding but not enforceable as law.³⁷

7.4.2 Solutions and Examples of International Regulatory Cooperation

A partial solution to bridge the challenges described above is to establish international standards or norms that have widespread agreement across countries because they are rooted in commonly shared legal and ethical principles. These norms then serve as heuristics to guide any international coordination.

For instance, global health governance essentially presupposes that the protection and promotion of health is not merely an issue of a person's country of residence but also has a strong transnational dimension, which is why the "right to health" is recognized in a number of international instruments.³⁸ The WHO Constitution envisages in its Preamble, that "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition. The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and States. The achievement of any State in the promotion and protection of health is of value to all."³⁹ Hence all WHO Member States have in principle endorsed a universal "right to health," which has also found its way into other international legal obligations and undertakings.⁴⁰ Such a norm then provides the argument for resource pooling to enable all populations to access available medical technology on the basis of need. Without such a norm, the case for resource pooling might be difficult to communicate since the costs of infection control (buying and delivering vaccines, responding to

Governance of Disease Outbreaks. *International Health Law: Lessons from the Ebola Crisis and Beyond* 355–59 (2017).

³⁷ Pia Acconci, *The Reaction to the Ebola Epidemic within the United Nations Framework: What Next for the World Health Organization?*, 18 MAX PLANCK YEARBOOK OF UNITED NATIONS LAW ONLINE 405 (2014).

³⁸ A. Katarina Weilert, *The Right to Health in International Law – Normative Foundations and Doctrinal Flaws*, *The Governance of Disease Outbreaks: International Health Law: Lessons from the Ebola Crisis and Beyond* (2017).

³⁹ Preamble, World Health Organization, *supra* note 30.

⁴⁰ Indeed, the realization of the right to health is closely dependent upon the attainment of other human rights, such as the right to food, housing, work, education, human dignity, life, nondiscrimination, equality, privacy, access to information, and free movement. As a result, a number of other international conventions and protocols deal with various facets of the right to health: see, e.g., Universal Declaration of Human Rights (Dec. 10, 1948) G.A. Res. 217 (III) A, art. 25, providing that provides that everyone "has the right to a standard of living adequate for the health and well-being of himself and of his family"; International Covenant on Economic, Social and Cultural Rights (Dec. 16, 1966) 993 U.N.T.S. 3, art. 12, providing the most comprehensive provision on the right to health in international human rights law.

outbreaks) fall on specific countries while the benefits (less infection spread overall, more equitable health distribution) are diffuse and time-lagged.

As a result, such basic norms provide important guidance that can be rapidly operationalized in crisis situations. For example, when COVID-19 vaccines became available in 2020, the WHO endorsed a values framework that included principles such as global and national equity as well as human well-being. This enabled the COVAX Initiative, a global collaboration to procure and supply COVID-19 vaccines to the world, to establish principles for vaccine distribution such as seeking to ensure that high-risk populations in every country had access to the primary series of vaccines first.

However, equitable distribution of vaccines globally has been stymied by other issues besides distribution, such as production, procurement, and local delivery. During the pandemic, nationalistic trade policies, differences in purchasing power between countries, variations in national regulatory frameworks, and complex procedures to move key vaccine inputs across borders prevented efforts to ensure equitable vaccine distribution.⁴¹ So in practice, while individual countries have used mechanisms consistent with WHO principles (such as distribution of vaccines according to vulnerability, rather than to willingness to pay), distribution between countries has nonetheless disadvantaged countries with fewer resources to produce and procure vaccines. Any set of broad guidelines is thus only as robust and valuable as the wider legal, political, and economic context allows it to be.

7.5 LESSONS FROM INFECTIOUS DISEASE CONTROL

Given the large between-country externalities involved in infectious disease interventions, there should be large net health and economic gains to be made globally by multilateral cooperation in this area. However, the global infectious disease control landscape has become extremely complex and fragmented, with convening, governance, financing, action, and advocacy roles often split between different public and private actors pursuing their own agendas. The stated agendas can range from pursuing national self-interest (State representatives), improving global health within a given timeline (private charities), advocating for increasing funding in a certain health area (nongovernmental organizations), through to maximizing shareholder value (pharmaceutical companies). Hence there is no guarantee that all these actors are able to cooperate to pursue the theoretical optimum cooperative solution.

Consequently, a pragmatic route has been to identify broader norms and standards that are acceptable across all actors. These norms can then be used to identify

⁴¹ Indermit Gill & Michele Ruta, *Why Global Vaccine Equity Is the Prescription for a Full Recovery*, BROOKINGS (Feb. 11, 2022), <https://www.brookings.edu/blog/future-development/2022/02/11/why-global-vaccine-equity-is-the-prescription-for-a-full-recovery/> (last visited Jan. 2, 2024).

low-hanging fruit where international agreement is easier to achieve. For instance, one of the great successes of international coordination was the eradication of smallpox through vaccination in 1980. This achievement was possible because it was feasible both technically (a cheap and effective vaccine existed, and humans were the only host of the smallpox virus) and politically (both the United States and the Soviet Union found common cause in eradicating smallpox).⁴² This then enabled international cooperation toward eradication of other infections such as polio, measles and trachoma.

Indeed, the eradication or prevention of specific diseases may provide the most viable room for negotiation and subsequent cooperation. A similar rationale may help inform discussions on international coordination in the realm of content moderation and online platform governance.

7.6 DERIVING RECOMMENDATIONS FOR PLATFORM RESPONSIBILITY REFORMS

In 1978, French historian Emmanuel Le Roy Ladurie suggested that the world had historically become a “marché commun des microbes” (a “common market of microbes”), as large epidemic outbreaks followed established trade routes and troop movements.⁴³ Online platforms have since become “digital town squares,” with information, including dis- and misinformation and other harmful content, following even faster and more interconnected routes of transmission. Indeed, much like in the infectious disease space, the responses to global “outbreaks” of dis- and misinformation and harmful content appear to be equally complex and fragmented. For this reason, this chapter relies on the lessons from infectious disease control highlighted above to make recommendations in the domain of online platform responsibility.

The principle of achieving low-hanging fruit first to build trust and momentum toward more challenging (but still achievable) goals extends to the real of online platforms. The low-hanging fruit in the digital social media space may include regulation to prevent the dissemination of material that virtually all actors can agree is undesirable, such as images of sexual exploitation of minors or harmful and incorrect medical advice, as well as technical instructions that enable the construction of weapons of mass destruction. The feasibility of such a consensus can be derived from equivalents in infectious disease control that include disease eradication and prevention of the spread of emerging infections at the source, since these activities have a clear goal, definable end, and easily identifiable benefits for all

⁴² D. Henderson, *Smallpox Eradication – a Cold War Victory*, 19 WORLD HEALTH FORUM 113 (1998).

⁴³ Emmanuel Le Roy Ladurie, *Un Concept: L'Unification Microbienne Du Monde (XIV^e–XVII^e Siècles)*, 23 SCHWEIZERISCHE ZEITSCHRIFT FÜR GESCHICHTE 627, 629 (1973).

countries. Yet, as the early historical experiences in international health governance have taught us, agreement on what constitutes such low-hanging fruit in the online information space and, more importantly, the definition of its causes and origins, will inevitably prove contentious. This means that States and other involved actors would have to agree on the lowest common denominator in this realm, as a starting point in their attempts at international cooperation. Progress beyond the low-hanging fruit is more challenging for two main reasons.

Firstly, while there may be consensus on the desirability of some goals, there may be disagreement over how the cost of reaching them is shared. Examples include the cost of moderating undesirable content on online platforms (and the cost of adverse publicity from unpopular moderation decisions), which may be analogized to the cost of vaccination development and production in the infectious disease space. Such activities need to be accompanied with appropriate mechanisms for resource sharing so that costs of the activities are equitably borne and are commensurate with the benefits. This rationale must also extend to the equal investment of content moderation resources across online platforms' global presence to ensure that "outbreaks" of disinformation are not relegated to regions of the world that may not be at the top of online platforms' market priorities lists.

Secondly, there may not even be consensus on the relative desirability of goals. The harms from lack of infection control (people dying as infectious diseases spread) are almost universally accepted as bad, while the harms from the spread of disinformation are more contested and often a matter to be judged in the "eye of the beholder" or in this case, "disseminator." What may be "political speech" to one platform user is "hate speech" to another, and vice versa. What one State may consider interference in its electoral system, another State may disavow or label as an information campaign aimed at building oppositional political capital. Needless to say, achieving international agreement on what content may be deemed harmful and thus worthy of removal from online platforms poses a far greater challenge than agreeing on infectious diseases that should be prevented and cured. However, as with infectious diseases, the far-reaching consequences of harmful online content still necessitates efforts to find common ground in regulating such content, at the very least between like-minded nations.

Third, both nationally and internationally, resources to control infections and harmful content on social media (such as vaccines, staff, and systems to enforce content moderation) are largely private goods (rivalrous and excludable). Conversely, the goods from better control (such as better information leading to people making more welfare-enhancing choices) are largely public goods (non-rivalrous and non-excludable) or at least club goods (non-rivalrous and excludable). As a result, both a national and international framework that addresses platform responsibility and content moderation must take this into account and create appropriate incentives that shape online platforms' resource allocation decisions.