

Framing Paper
Health as a Global Public Good



This paper was produced by Dr Obijiofor Aginam, Principal Visiting Fellow at the United Nations University International Institute for Global Health and Adjunct Research Professor of Law at Carleton University, as a framing paper for the health expert preparatory roundtable in March 2022.

All content (text, visualizations, graphics), except where otherwise specified or attributed, is published under a Creative Commons Attribution-Noncommercial-Share Alike IGO license (CC BY-NC-SA 3.0 IGO). Using, reposting and citing this content is allowed without prior permission.

Front cover: Piron Guillaume / Unsplash

"The social and economic crisis precipitated by COVID-19 is affecting families, communities, and nations across the globe." – The Independent Panel for Pandemic Preparedness and Response

"COVID-19 shines a light on our common humanity and shared vulnerabilities, and it is only through a collective, collaborative response that all our essential interests can be served." – Gro Harlem Brundtland

## Health as a Global Public Good: The Challenge of Framing

The debate on what constitutes a public good, "a commodity or service that is made available to all members of a society," has long been part of government policy and economic analysis. In an age of global interdependence of nations, peoples, and societies, "it is becoming clear in many areas that matters which were once confined to national policy are now issues of global impact or concern." In a landmark publication released in 1999, the United Nations Development Programme (UNDP) made an ambitious effort to elevate the concept of public goods from the national to the global level, applying the concept to a wide range of issues including health, environment, cultural heritage, knowledge, information, and peace and security. UNDP defined a global public good (GPG) as: "a public good with benefits that are strongly universal in terms of countries (covering more than one group of countries), people (accruing to several, preferably all, population groups) and generations (extending to both current and future generations, or at least meeting the needs of current generations without foreclosing development options for future generations."

The two main characteristics of public goods: non-rivalry in consumption and non-excludability, according to the UNDP, make 'humanity as a whole' the beneficiary of GPGs. In a subsequent study dealing with the application of the non-rivalrous and non-excludable characteristics of public goods to global health, the World Health Organization (WHO) observed that the UNDP definition of global public goods was problematic for three reasons. First, it did not make an explicit distinction between "cross-border" and "within-country" externalities of public goods. Second, the emphasis on "strong universality" in terms of population groups could mean that health programmes specifically targeting women, children, physically handicapped, racialized groups, or a genetically affected group like those with sickle-cell disease could be excluded. Third, the intergenerational benefit/equity, if strictly applied, would exclude disease eradication programmes that often require reallocation of resources for uses that are of greater benefit to the health of the present generation. The WHO study deployed GPGs as: "goods exhibiting a significant degree of publicness (i.e. non-excludability and non-rivalry) across national boundaries (and thus not necessarily population or generational boundaries," suggesting that this "cross-national characteristic must involve more than two nations, with at least one outside the traditional regional groupings (e.g. Europe, Sub-Saharan Africa, or South-East Asia)."3 The definition of a GPG in the WHO study as "a good which it is rational, from the perspective of a group of nations collectively, to produce for universal consumption, and for which it is irrational to exclude an individual nation from its consumption, irrespective of whether that nation contributes to its financing,"4 is consistent with the foundational pillars of inclusivity and solidarity in the WHO Constitution:

- 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 cooperation of individuals and States.
- The achievement of any State in the promotion and protection of health is of value to all.

- Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger.
- Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.
- The **extension to all peoples** of the benefits of medical, psychological, and related knowledge is essential to the fullest attainment of health.
- Informed opinion and active cooperation on the part of the public are of the utmost importance in the improvement of the **health of the people**.
- Governments have a responsibility for the **health of their peoples**, which can be fulfilled only by the provision of adequate health and social measures.<sup>5</sup>

Adopted in 1946 by the International Health Conference held in New York, these foundational principles of inclusivity in international health cooperation within the United Nations system were recognized as "basic to the happiness, harmonious relations and security of all peoples."

## A Holistic Concept of Health

Human health is a derivative of multiple circumstances and variables. The 'globalization of public health' in an interdependent world of sovereign nation States raises complex governance challenges for health systems to address the interlinkages of emerging and re-emerging infectious diseases, chronic non-communicable diseases (and risk factors), and the health impacts of large-scale natural disasters. The interdependence of States, societies, and peoples have altered the erstwhile distinction between national and (international) global health. In an interdependent world, pathogenic microbes do not recognize the territorial and geopolitical boundaries of States. COVID-19 and past pandemics have led to a 'microbial unification of the world', immersing all of humanity in a single germ pool in which there are no health sanctuaries.

In the realm of non-communicable diseases, trade in goods and services, and corporate investment regimes create unintended opportunities for the globalization of unhealthy lifestyles, and marketing of harmful products such as tobacco and unsafe food that lay the foundations for high blood pressure, increased blood glucose, obesity and, consequently, diabetes, cardiovascular disease, and other chronic illnesses. The health-related impact of natural disasters around the world is unprecedented in scale. To address these multifaceted but interlinked health challenges, there is an urgent need to innovatively adapt the governance architecture of global health by placing health firmly at the centre of sustainable development. Health, as defined by the Constitution of the WHO, is: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." The integrated nature of the 17 Sustainable Development Goals in the 2030 Agenda for Sustainable Development underscores the importance of a holistic conception of health, a paradigm that supports the "right of everyone" to the enjoyment of the highest attainable standard of health in the context of the underlying social, economic, and developmental dynamics within and among nations. This expansive and holistic approach promotes a right to health framework that includes: (i) access to affordable health care, broadly conceived to include essential drugs, vaccines, diagnostics, and therapeutics, and (ii) policy responses targeting the underlying social determinants of health.6

### Infectious Diseases

In all millennia of recorded history, infectious diseases have killed more people than wars. Plague devastated the city of Athens during the Peloponnesian War in 430 BC. The Plague of Justinian killed a third of the population in the Roman Empire. Black Death (Bubonic Plague) killed a third of Europeans in the 14<sup>th</sup> century. An estimated 80 per cent of Native Americans died of smallpox, measles, scarlet fever,

influenza, and chicken pox in the 16<sup>th</sup> and 17<sup>th</sup> centuries. The swine flu (Spanish flu) of 1918-1919 killed an estimated 22 million people globally. In recent decades, the crisis of newly emerging and re-emerging infectious diseases exemplified by the outbreaks (and often transboundary spread) of Ebola virus disease, lassa-fever, hanta-virus, West Nile virus, severe acute respiratory syndrome (SARS), MERS, zika, and the COVID-19 pandemic that is currently ravaging societies across all regions, has strongly reinforced the time-hallowed notion that pathogenic microbes do not respect the geopolitical boundaries of sovereign States. Throughout history, pandemics serve as wake-up calls for nation States, multilateral institutions, and civil society to rise to the challenges of the 'microbial unification of the world' driven by human vulnerability to disease-causing pathogens. As Brundtland observed, the ravaging COVID-19 pandemic with over 360 million confirmed cases and 5.6 million deaths globally, "shines a light on our common humanity and shared vulnerabilities."

#### Non-communicable Diseases

The mortality and morbidity burdens of non-communicable diseases (NCDs) constitute a major crisis that undermines the social and economic development of many countries particularly low and middle income countries. WHO estimates that: "NCDs, including heart disease, stroke, cancer, diabetes, and chronic lung disease, are collectively responsible for almost 70 per cent of all deaths worldwide. Almost three quarters of all NCD deaths, and 82 per cent of the 16 million people who died prematurely, or before reaching 70 years of age, occur in low and middle income countries." The leading NCDs share four major risk factors: tobacco use, physical inactivity, the harmful use of alcohol, and unhealthy diets. WHO states that: "the epidemic of NCDs poses devastating health consequences for individuals, families, and communities and threatens to overwhelm health systems," and the "socioeconomic costs associated with NCDs make the prevention and control of these diseases a major development imperative for the 21st century." Children are vulnerable to treatable NCDs (such as rheumatic heart disease, type 1 diabetes, asthma and leukaemia), "if health promotion, disease prevention, and comprehensive care are not provided." The Commission on Ending Childhood Obesity recommended policy pathways towards tackling childhood and adolescent obesity in different contexts around the world.

Trade and corporate investment regimes create opportunities for the globalization of harmful substances such as tobacco and processed food with limited nutritional content: high in salt, sugar, and fats that lay the foundations for high blood pressure, increased blood glucose, obesity and, consequently, diabetes, cardiovascular disease, and other chronic illnesses. While good for economic growth, the globalization of the world economy driven by trade and investment opportunities, also paradoxically, leads to the unintended consequence of creating a super-highway for the globalization of unhealthy lifestyles, and marketing of unsafe food and harmful products.

## The Challenge of Producing Global Public Goods for Health: Who Foots the Bill?

Every single study on GPGs for Health (GPGH) grapples with the question of who bears the financial burden of producing such goods. This is because most goods are produced in the private domain. In their critique of GPGH as a flawed paradigm, Mooney and Dzator argued that: "current discussions about producing GPGH, such as research into diseases of the poor, strengthening global surveillance, as well as capacity for prevention and control anytime anywhere, could be targeted mostly for their positive effects on health. Intermediate goods such as ... vaccines and drugs that may be involved in producing the GPGH are, however, predominantly private. There is a need to pay special attention to the production and transfer of these resources to the 'public domain', especially of the poor."

The complexities of producing GPGH are complicated by a knowledge economy that is often driven by a strong intellectual property protection for inventions, and private sector interests driven by return on investment for Research and Development (R&D) costs. Economic and financial incentives driven by profit maximization have historically been the major motivation behind the R&D budget in the global pharmaceutical industry.<sup>12</sup> Because of the disparities between the rich and poor countries, these economic and financial incentives often create a "fatal imbalance... between the health needs of poor people in developing countries and the lack of R&D to develop medicines to treat them."13 Two decades ago, the Global Forum for Health Research published the widely cited 10/90 Report that deplored the imbalance in global health research where less than 10 per cent of worldwide resources were put towards health in developing countries, where over 90 per cent of all preventable deaths worldwide occurred.<sup>14</sup> As Callahan and Wasunna observed: "The much cited "10/90 divide" – with 90 percent of medical research going toward diseases for just 10 percent of the world population – shows the gross neglect of research for diseases afflicting the world's majority poor... The bottom line is that the developing world does not represent a profitable market for the international pharmaceutical industry. In effect, the industry is saying that, because of an inability to pay for them, or to properly distribute and monitor them, development of drugs for the diseases of poor countries is a financial loser."15

Is there any feasible synthesis between the proposition of health as a public good, and the postulation that intellectual property (patent) incentivizes private sector innovation to produce such goods? The WHO Commission on Macroeconomics and Health tackled this question by recognizing that the "production of new knowledge, especially through investments in research and development (R&D)," is an important kind of public good. The WHO Commission stated that: "since knowledge is 'non-rival,' meaning that the use of knowledge by one person does not diminish its availability for others, it makes sense for society to ensure that new knowledge is widely available and actually used. Yet if the fruits of R&D are freely available, profit-maximizing firms will lack the incentive to invest in R&D in the first place. The pragmatic approach in balancing the need for availability of knowledge with the need for private incentives to invest in R&D is to combine two policy instruments: public financing of R&D in combination with patent protection for private investors in R&D."

The "incentive mechanisms fail at both ends" for two reasons. First, the governments of poor countries would lack the funds to subsidize R&D. Second, patent protection carries little value when there is no significant market at the end of the R&D process. Because poor countries benefit from R&D when the rich also suffer from the same diseases, the Commission distinguished between three types of diseases.

- **Type I diseases** are prevalent in both rich and poor countries, with large numbers of vulnerable population in each.
- **Type II diseases** are incident in both rich and poor countries, but with a substantial proportion of the cases in poor countries.
- **Type III diseases** are those that are overwhelmingly or exclusively incident in the developing countries, such as African sleeping sickness (trypanosomiasis) and African river blindness (onchocerciasis). 18

This third type of disease – the very neglected diseases - receive extremely little R&D, and "essentially no commercially based R&D in the rich countries. When new technologies are developed, they are usually serendipitous, as when a veterinary medicine developed by Merck (ivermectin) proved to be effective in control of onchocerciasis in humans." Proposing that the WHO and the Global Forum for Health Research partner with the donor and research communities to "identify, on an ongoing basis, the high-priority areas of R&D for poor country disease conditions that are neglected by the international pharmaceutical sector," the Commission recommended that "at least [USD] 3 billion per year should be allocated to toward R&D directed at the health priorities of the world's poor."

The question underlying virtually all proposals on stimulating industrial R&D for neglected diseases is who should pay. Can rich countries underwrite the cost for poor countries? How could resources be allocated towards R&D targeting diseases that are prevalent in poor countries? These questions are not limited to NTDs. The recent global production, distribution, and access to COVID-19 vaccines were, for instance, characterized by 'vaccine nationalism',<sup>21</sup> a protectionist policy by rich countries with less than 20 percent of the world's population stockpiling 60 percent of the world's vaccine supply, aiming to first exclusively vaccinate 70 percent of their population to achieve herd immunity.<sup>22</sup> What then is the fate of hundreds of millions of people globally who are either being left behind or excluded from the benefits of "public goods" emerging from biomedical inventions? There is need to innovate and adapt the governance architecture of global health from a strictly State-centric to a multi-centric model that harnesses the skills and strengths of diverse actors towards a progressive realization of the right of everyone to the enjoyment of the highest attainable standard of health.

## Governance Arrangements for GPGH: The Way Forward

In well over 300 years since the Peace of Westphalia in 1648, nation States have been the dominant actors in the governance architecture of the international system. In the 21<sup>st</sup> century, one certain fact is the uncertain promise of the Westphalian system to effectively address emerging and re-emerging global issues including disease pandemics. Although "governance" has been firmly entrenched in international policy literature since the 1990s, it is nonetheless useful to offer a definition and earmark its parameters. The Commission on Global Governance defined governance as: "The sum of the many ways individuals and institutions, *public and private*, manage their common affairs. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action may be taken. It includes *formal institutions* and regimes empowered to enforce compliance, as well as *informal arrangements* that people and institutions either have agreed to or perceive to be in their interest."<sup>23</sup>

Keohane and Nye defined governance as: "the processes and institutions, both *formal and informal*, that guide and restrain the collective activities of a group ... Governance need not necessarily be conducted exclusively by governments and the international organizations to which they delegate authority. Private firms, associations of firms, non-governmental organizations (NGOs), and associations of NGOs all engage in it, often in association with governmental bodies, to create governance; sometimes without governmental authority."<sup>24</sup>

In relation to global health, Fidler defined global health governance as: "the use of *formal and informal institutions*, rules, and processes by States, intergovernmental organizations, and non-State actors to deal with challenges to health that require cross-border collective action to address effectively."<sup>25</sup>

Governance does not necessarily derive its legitimacy from a *formalized* governmental and intergovernmental authority. In an interdependent world, governance arrangements to address newly emerging and remerging infectious disease pandemics, and prevalent non-communicable diseases should be anchored on what Rosenau called "a bifurcated system", one based on the State-centric system driven by governments, and the other based on a "multi-centric system" driven by a collection of non-State actors. <sup>26</sup> In order to effectively govern public health in an era of global interdependence of nations, societies, and peoples, it is imperative to adapt the governance architecture of the international system to align the strategies and interests of all relevant actors: nation States, intergovernmental organizations, and a collection of non-State actors: civil society, NGOs, business and corporations, and philanthropic foundations. Because States, and non-State actors could compete, cooperate, and interact, the proliferating centres of "authority on the global stage is thus dense with actors, large and small, formal and informal, economic and social, political and cultural, liberal and authoritarian, who collectively form a highly complex system of global

governance."<sup>27</sup> Buttressing this point and stressing the complexity of the governance architecture for global health, Zacher and Keefe observed that: "contemporary global health governance is complicated and messy; it is comprised of numerous and varied actors with competing values, interests and motivations."<sup>28</sup>

To avoid foreseeable 'legitimacy deficits', the WHO (supported by the UN and other multilateral institutions), as the intergovernmental organization of 193 member States with a constitutional mandate to serve as the "directing and co-ordinating authority on international health work," is ideally positioned to lead and innovate these governance arrangements.<sup>29</sup> The operational framework should be anchored on a partnership between States and non-State actors crafted with a balance of public and private sector interests and motivations. As WHO observed: global health partnerships, networks and alliances, and initiatives have been established to raise visibility of an unmet need, support coordination, provide financial support to countries, and/or provide common platforms for working together by combining the relative strengths of different stakeholders including the public sector, private sector entities, non-governmental organizations, philanthropic foundations, and academic institutions.<sup>30</sup>

To incentivize the production of GPGH, a partnership should have a "needs-driven agenda, and equity-oriented global R&D as a public responsibility." The task of aligning the interests and motivations of the public and private sectors might not be a complex and complicated task going by the recent proposals of some influential non-State actors. In May 2015, Médecins Sans Frontières (MSF), the Drugs for Neglected Diseases *initiative* (DND*i*), and a group of global health experts called for the "creation of a global health research and development (R&D) fund and mechanism to address deadly gaps in innovation for emerging infectious diseases such as Ebola, anti-microbial resistance, and a host of other diseases that have been neglected by the pharmaceutical market."<sup>31</sup> In 2019, Novartis announced that its "investment in R&D priority disease areas, as defined by the Access to Medicines Foundation, was approximately USD 50 million," and that these "priority disease areas have been identified as those where R&D is most urgently needed by patients in low and middle income countries (LICs and LMICs) due to ineffective, maladaptive or non-existent products for certain diseases, conditions, and pathogens."<sup>32</sup>

Fortunately, there are existing global public-private partnerships that can serve as models such as the Global Fund to Fight AIDS, Tuberculosis and Malaria; Gavi, the Vaccine Alliance; Unitaid, and newly emerging partnerships like The Coalition for Epidemic Preparedness Innovations (CEPI) that bring together public, private, philanthropic, and civil society organizations for the sole purpose of accelerating the "development of vaccines against emerging infectious diseases and to enable equitable access to these vaccines for people during outbreaks." In crafting these partnerships as part of the governance architecture to produce GPGH, it is imperative to build trust among the diverse actors to elicit enlightened self-interest that could compel "industrialized country governments and private corporations to do what it takes to drastically reduce the current burden of disease in the developing world." 33

# An Overview of the Recommendations of the Independent Panel for Pandemic Preparedness and Response (IPPPR)

The IPPPR, based on the lessons from the COVID-19 pandemic, made seven interlinked policy recommendations aimed at transforming the international system for pandemic preparedness and response to enable it to "prevent a future infectious disease outbreak from becoming a pandemic." This section highlights key IPPPR recommendations and raises potential implementation challenges.

1) Elevate pandemic preparedness and response to the highest level of political leadership: (a) Establish a high-level Global Health Threats Council led by Heads of State and Government (b) Heads of

State and Government adopt a political declaration at a Special Session of the United Nations General Assembly in September 2021, and (c) Adopt a Pandemic Framework Convention within the next 6 months.

- Challenge: While these recommendations lend political support and visibility to pandemic preparedness
  and response, they are extremely time sensitive. Organizing a special Session of the UN General
  Assembly to adopt a political declaration requires time and logistics to build consensus among
  countries. Like all treaties, negotiating a Pandemic Framework Convention under the auspices of the
  WHO will take years to conclude, given the divergent positions of its 193 member States on the issues
  to be negotiated, and whether the proposed pandemic treaty should legally binding.
- **2)** Strengthen the independence, authority, and financing of WHO, among other recommendations: (a) Establish the financial independence of WHO based on fully unearmarked resources, and on an increase in member States' fees to two-thirds of the WHO base programme budget.
- **Challenge**: The funding of WHO, like most intergovernmental institutions, is impeded by the geopolitical realities of the inter-State system where the 'strategic interests' of countries do not often converge on the same issues.
- **3)** Invest in preparedness now to prevent the next crisis: (a) All national governments to update their national preparedness plans against targets and benchmarks to be set by WHO within six months, ensuring that there are appropriate and relevant skills, logistics, and funding available to cope with future health crises, (b) WHO to formalize universal periodic peer reviews as a means of accountability and learning between countries.
- Challenge: Health systems reform in low and middle income countries requires substantial human and financial investment. Countries are often reluctant to subject themselves to voluntary peer review mechanism in an international system of sovereign States.
- **4)** A new agile and rapid surveillance information and alert system, among other recommendations, (a) WHO to establish a new global system for surveillance, based on full transparency by all parties, using state of the art digital tools, and (b) The World Health Assembly to give WHO both the explicit authority to publish information about outbreaks with pandemic potential immediately without requiring the prior approval of national governments, and the power to investigate pathogens with pandemic potential with short-notice access to relevant sites, provision of samples, and standing multi-entry visas for international epidemic experts to outbreak locations.
- Challenge: WHO has the authority to publish information about outbreaks under the International Health Regulations of 2005 without necessarily requiring the prior approval of national governments. There is need to reconcile this regulation with the proposed pandemic treaty under the auspices of WHO.
- **5)** Establish a pre-negotiated platform for tools and supplies: (a) Transform the current Access to COVID-19 Tools Accelerator (ACT-A) into a truly global end-to-end platform to deliver the global public goods of vaccines, therapeutics, diagnostics, and essential supplies, (b) Secure technology transfer and commitment to voluntary licensing in all agreements where public funding has been invested in R&D, and (c) Establish stronger regional capacities for manufacturing, regulation, and procurement of needed tools for equitable and effective access to vaccines, therapeutics, diagnostics, and essential supplies, as well as for clinical trials.

- **Challenge**: These recommendations would involve protracted negotiations between governments, WHO, regional organizations, and the private sector. There is need to reconcile and balance the public health objectives of governments and WHO with the corporate interests of the private sector.
- 6) Raise new international financing for pandemic preparedness and response, among other recommendations: (a) Create an International Pandemic Financing Facility to raise additional reliable funding for pandemic preparedness and for rapid surge financing for response in the event of a pandemic with the capacity to mobilize long term (10-15 year) contributions of approximately USD 5-10 billion per annum to finance preparedness, with the ability to disburse up to USD 50-100 billion at short notice in the event of a crisis, (b) There should be an ability-to-pay formula adopted whereby larger and wealthier economies will pay the most, preferably from non-Official Development Assistance (ODA) budget lines and additional to established ODA budget levels.
- **Challenge**: Could enlightened self-interest drive industrialized and wealthier economies to create and substantially fund the proposed International Pandemic Financing Facility?
- 7) National Pandemic coordinators have a direct line to Head of State or Government: (a) Heads of State and Government to appoint national pandemic coordinators who are accountable to them, and who have a mandate to drive whole-of-government coordination for pandemic preparedness and response, and (b) National pandemic preparedness and response needs to be strengthened through increased multidisciplinary capacity in public health institutions, annual simulation exercises, increased social protections and support to health workers, including community health workers, investment in risk communication, planning with communities and in particular those who are marginalized.
- Challenge: These recommendations require effective coordination and policy coherence across multiple government agencies and sectors including coordination with existing national International Health Regulations Focal Points within countries.

### References

- <sup>1</sup> David Woodward and Richard D. Smith, "Global Public Goods for Health: Concepts and Issues," *Global Public Goods for Health: Health, economic and public health perspectives* eds. Richard Smith et al. (Oxford: Oxford University Press, 2003): 3
- <sup>2</sup> Inge Kaul, Isabelle Grunberg and Marc A. Stern, *Global Public Goods: International Cooperation in the 21*<sup>st</sup> *Century* (Oxford: Oxford University Press, 1999): 509-510.
- <sup>3</sup> David Woodward and Richard D. Smith, "Global Public Goods for Health: Concepts and Issues," *Global Public Goods for Health: Health, economic and public health perspectives* eds. Richard Smith et al. (Oxford: Oxford University Press, 2003): 8.
- <sup>4</sup> Ibid: 9.
- <sup>5</sup> WHO, Constitution of the World Health Organization 43rd Edition (Geneva: WHO, 2001): 1.
- <sup>6</sup> The social determinants of health (SDH), according to the WHO, are "the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies, and political systems. The SDH have an important influence on health inequities the unfair and avoidable differences in health status seen within and between countries". WHO, "Social Determinants," last accessed 22 March 2022, <a href="https://www.who.int/health-topics/social-determinants-of-health#tab=tab">https://www.who.int/health-topics/social-determinants-of-health#tab=tab</a> 1.
- <sup>7</sup> WHO, "Noncommunicable Diseases," last accessed 22 March 2022, <a href="https://www.who.int/health-topics/noncommunicable-diseases#tab=tab\_1">https://www.who.int/health-topics/noncommunicable-diseases#tab=tab\_1</a>.
- 8 Ibid.
- <sup>9</sup> WHO, *Report of the Commission on Ending Childhood Obesity* (Geneva: WHO, 2017); <a href="https://apps.who.int/iris/bitstream/handle/10665/259349/WHO-NMH-PND-ECHO-17.1-eng.pdf?sequence=1">https://apps.who.int/iris/bitstream/handle/10665/259349/WHO-NMH-PND-ECHO-17.1-eng.pdf?sequence=1</a>.
- <sup>10</sup> Inge Kaul, Isabelle Grunberg and Marc A. Stern, *Global Public Goods: International Cooperation in the 21*<sup>st</sup> *Century* (Oxford: Oxford University Press, 1999); Inge Kaul et al., *Providing Global Public Goods: Managing Globalization* (New York: Oxford University Press, 2003); Richard Smith, et al., *Global Public Goods for Health* (Oxford: Oxford University Press, 2003); Yonette F. Thomas et al., "Reaffirming the significance of global public goods for health: Global solidarity in response to Covid-19 and future shocks," *G20 Policy Insights* TF11 (2020), https://www.g20-insights.org/wp-content/uploads/2020/11/T20 TF11 PB1.pdf.
- <sup>11</sup> Gavin Mooney and Janet Dzator, "Global public goods for health: A flawed paradigm," *Global Public Goods for Health* eds. Richard Smith et al. (Oxford: Oxford University Press, 2003): 234.
- <sup>12</sup> Michael A. Santoro and Thomas M. Gorrie, *Ethics and the Pharmaceutical Industry* (Cambridge University Press, 2005).
- <sup>13</sup> James Orbinski, *An Imperfect Offering: Dispatches from the Medical Frontline* (London: Rider, 2008), p366.
- <sup>14</sup> Global Forum for Health Research, *The 10/90 Report on Health Research* (Geneva: Global Forum for Health Research, 2000).
- <sup>15</sup> Daniel Callahan & Angela Wasunna, *Medicine and the Market: Equity v. Choice* (Baltimore, MD: Johns Hopkins University Press, 2006): 192.
- <sup>16</sup> WHO, Macroeconomics and Health: Investing in Health for Economic Development: Report of the Commission on Macroeconomics and Health (Geneva: WHO, 2001): 77.
- <sup>17</sup> Ibid: 77.
- 18 Ibid: 78.
- 19 Ibid.

- <sup>20</sup> Ibid: 81.
- <sup>21</sup> Tedros Adhanom Ghebreyesus, "Vaccine Nationalism Harms Everyone and Protects No One," *Foreign Policy*, 2 February 2021, <a href="https://foreignpolicy.com/2021/02/02/vaccine-nationalism-harms-everyone-and-protects-no-one/">https://foreignpolicy.com/2021/02/02/vaccine-nationalism-harms-everyone-and-protects-no-one/</a>.
- <sup>22</sup> "World has entered 'vaccine apartheid,'" *Reuters*, 17 May 2021, <a href="https://www.reuters.com/business/healthcare-pharmaceuticals/world-has-entered-stage-vaccine-apartheid-who-head-2021-05-17/">https://www.reuters.com/business/healthcare-pharmaceuticals/world-has-entered-stage-vaccine-apartheid-who-head-2021-05-17/</a>.
- <sup>23</sup> Commission on Global Governance, *Our Global Neighborhood: The Report of the Commission on Global Governance* (New York: Oxford University Press, 1995).
- <sup>24</sup> Robert O. Heohane & Joseph S. Nye Jr, "Introduction," *Governance in a Globalizing World* eds. in Robert O. Keohane and Joseph S. Nye Jr. (Washington: Brookings, 2000): 12.
- <sup>25</sup> David P. Fidler, "The Challenges of Global Health Governance," *Council on Foreign Relations International Institutions and Global Governance Program Working Paper* (2010): 3.
- <sup>26</sup> James N. Rosenau, "Governance in a New World Order," *The Global Transformations Reader* eds. David Held and Anthony McGrew (Cambridge: Polity Press, 2000): 225.
- <sup>27</sup> Ibid.
- <sup>28</sup> Mark W. Zacher and Tania J. Keefe, *The Politics of Global Governance: United By Contagion* (New York: Palgrave MacMillan, 2008), 135
- <sup>29</sup> A study in 2018 found that "multilaterals are well placed to deliver support for GPGs given their clear global or regional mandates. In the current climate of growing worldwide nationalism and populism, the multilateral institutions now find themselves well positioned to become a countervailing force in taking international collective action and supporting GPGs for health", Gavin Yamey et al., "Intensified multilateral cooperation on global public goods for health: three opportunities for collective action," Centre for Policy Impact Policy Paper (2018), <a href="https://centerforpolicyimpact.org/wp-content/uploads/sites/18/2018/11/Multilaterals-and-GPGs">https://centerforpolicyimpact.org/wp-content/uploads/sites/18/2018/11/Multilaterals-and-GPGs</a> LONG Final.pdf.
- <sup>30</sup> World Health Assembly, "Sixty-Third World Health Assembly, Agenda item 18.1: Partnerships," WHO, 21 May 2010, WHA63.10, <a href="https://cdn.who.int/media/docs/default-source/documents/partnerships/partnerships-63rd-whaagenda-item-18-1-21-may-2010.pdf?sfvrsn=a9b06d88\_2">https://cdn.who.int/media/docs/default-source/documents/partnerships/partnerships-63rd-whaagenda-item-18-1-21-may-2010.pdf?sfvrsn=a9b06d88\_2</a>.
- <sup>31</sup> Manica Balasegaram et al., "A Global Biomedical R&D Fund and Mechanism for Innovations of Public Health Importance", *PLOS Medicine* (2015), <a href="https://dndi.org/wp-content/uploads/2015/05/PLOSMedicine\_Balasegaram\_Global-RnD-Fund\_2015.pdf">https://dndi.org/wp-content/uploads/2015/05/PLOSMedicine\_Balasegaram\_Global-RnD-Fund\_2015.pdf</a>; MSF and DND*i*, "MSF and DND*i* Join call for a biomedical research and development fund and mechanism to meet pressing global health needs," 11 May 2015, <a href="https://dndi.org/press-releases/2015/pr-msf-dndi-randd-fund/">https://dndi.org/press-releases/2015/pr-msf-dndi-randd-fund/</a>.
- <sup>32</sup> Novartis, "Research & Development," last accessed 22 March 2022, <a href="https://www.novartis.com/esg/access/novartis-access-principles/research-development">https://www.novartis.com/esg/access/novartis-access-principles/research-development</a>.
- <sup>33</sup> Gro Harlem Brundtland, "Globalization as a Force for Better Health," Lecture presented at the London School of Economics, London, 16 March 2001.



cpr.unu.edu @UNUCPR

767 Third Avenue New York, NY 10017