
Research
Paper

Global Health
Programme

Asia-Pacific
Programme

July 2021

Solidarity in response to the COVID-19 pandemic

Has the world worked together to tackle the coronavirus?

Afifah Rahman-Shepherd, Charles Clift, Emma Ross, Lara Hollmann,
Nina van der Mark, Benjamin Wakefield, Champa Patel and Robert Yates



Chatham House, the Royal Institute of International Affairs, is a world-leading policy institute based in London. Our mission is to help governments and societies build a sustainably secure, prosperous and just world.

Contents

	Summary	2
01	Introduction	3
02	Global solidarity and multilateral support	8
03	Case study 1: COVAX, vaccines and solidarity	25
04	Regional solidarity	30
05	Case study 2: Europe's turbulent journey through solidarity	34
06	Solidarity within countries	38
07	Lessons for solidarity	47
	Acronyms and abbreviations	53
	About the authors	54
	Acknowledgments	56

Summary

-
- In February 2020, as the scale and severity of the COVID-19 outbreak was fast becoming evident, the Director-General of the World Health Organization, Dr Tedros Adhanom Ghebreyesus, emphasized that the only way to defeat the outbreak was for all countries to work together in a spirit of solidarity. Dr Tedros's message on the need for solidarity was clear and consistent: '[W]e cannot defeat this outbreak without solidarity – political solidarity, technical solidarity and financial solidarity,' he stated at a media briefing on 5 February.
 - Heightened pre-existing geopolitical tensions and competition have undermined global solidarity and the ability of countries to work together to defeat what was subsequently declared a pandemic. Multilateral institutions and mechanisms did not have the necessary capacities, capabilities, power and resources to enforce solidarity norms.
 - Achieving equitable distribution of vaccines globally is the greatest test of global solidarity. While the ACT-Accelerator and COVAX have been major multilateral platforms for global solidarity, the potential for these innovations to fulfil this objective has been undermined because governments have collectively failed to strike the right balance between the political need to prioritize their own populations and the global necessity to bring the pandemic under control in all countries.
 - Regions that have demonstrated solidarity successfully coordinated among themselves, cooperated to share and allocate resources, and leveraged regional governance arrangements. This has been most evident across Africa and in the Caribbean region.
 - At the national level, the quality of the relationships and interactions between key groups of leaders such as politicians, public health experts and scientists has been critical in shaping the degree to which any population acts in solidarity with the nation's response efforts. Many governments have failed in their responsibility to protect and support the most vulnerable in their societies.
 - Solidarity requires strong political commitment and high levels of social cohesion. Where solidarity has been weak, inequities have widened and effective responses to the pandemic have been frustrated. Governments need to address long-standing social and economic inequalities and develop national solidarity plans to maximize protection for vulnerable groups through financial, social and healthcare measures during crises.
 - Any new governance structures and instruments established in response to the COVID-19 pandemic – or reforms to existing ones – must have at their core the objective of fostering global solidarity and addressing inequity.

01

Introduction

The World Health Organization has repeatedly called for solidarity to defeat the COVID-19 pandemic. This paper examines how the world has responded to the call for solidarity.

On 30 January 2020, the Director-General of the World Health Organization (WHO), Dr Tedros Adhanom Ghebreyesus, declared the global spread of a novel coronavirus disease (later named COVID-19) a public health emergency of international concern (PHEIC). WHO subsequently characterized the spread as a pandemic on 11 March. The impact of the COVID-19 pandemic has severely challenged governments, health systems and economies, and has devastated millions of lives and livelihoods all over the world.

Following the PHEIC declaration, WHO provided recommendations for all countries to adopt, intended to curb the spread of the virus. At the same time, Dr Tedros called for all countries ‘to work together in a spirit of solidarity’.¹ This was the first of many calls for global solidarity to tackle the outbreak. In the ensuing speeches and press briefings, such calls were increasingly linked with the urgent need for international cooperation and coordinated action to achieve a common goal.

This research paper examines how – and whether – the world has demonstrated solidarity in tackling a global crisis of this scale and magnitude. How well have governments worked together to combat a common global threat? How well have they fostered solidarity in their own populations to stimulate an effective response to the disease? What lessons can be learned?

First, how should solidarity be defined? In the late 19th century, sociologist Emile Durkheim identified two forms of solidarity, both of which are relevant to the pandemic response. ‘Mechanical’ solidarity is where members of a society hold common values and beliefs that facilitate cooperation to achieve shared

¹ World Health Organization (2020), ‘Report of the Director-General, 146th Meeting of the Executive Board, 3 February 2020’, https://apps.who.int/gb/ebwha/pdf_files/EB146/B146_2-en.pdf. (All URLs given in this paper were valid in early July 2021.)

goals. Mobilizing mechanical solidarity has been particularly important in the implementation of non-pharmaceutical interventions during the pandemic. ‘Organic’ solidarity recognizes that industrialized societies rely on decentralized cooperation between individuals and organizations. Again, this form of solidarity has proved critical, particularly in relation to the production of the many tools, from masks to vaccines, that are needed to fight COVID-19.²

At a global level, WHO has played a significant role in defining solidarity and shaping it as a concept relevant to pandemic response efforts. It was communicated as a choice between policies and actions that aimed to unite, and policies and actions that sowed division and competition. This choice, as articulated by Dr Tedros, depended on the ability of actors collectively to identify the virus as the ‘common enemy’ and create an effective shared pathway to stop transmission. Solidarity was presented as the best way forward for effectively combating the pandemic. The message was clear early on: ‘[We] cannot defeat this outbreak without solidarity – political solidarity, technical solidarity and financial solidarity,’ Dr Tedros said.³

Internationally, this translates to solidarity between countries in recognition of the interdependencies between countries and people, and the need for mutual support. But efforts to foster such solidarity have been complicated by a geopolitical context marked by serious tensions – notably between the US and China, but also linked to the rise of nationalism and populism, and increased competition between countries. WHO considered the greatest threat to solidarity was the lack of appropriate political leadership and willingness of governments to work together.⁴

WHO considered the greatest threat to solidarity was the lack of appropriate political leadership and willingness of governments to work together.

In the field of global health, solidarity is often invoked normatively as a moral basis for a commitment by high-income countries (HICs) to provide assistance to low- and middle-income countries (LMICs).^{5,6} This is consistent with the central promise of the 2015 Sustainable Development Goals (SDGs) to ‘leave no one behind’, specifically in SDG 10, which commits nations to ‘reduce

² Mishra, C. and Rath, N. (2020), ‘Social solidarity during a pandemic: Through and beyond Durkheimian Lens’, *Social Sciences & Humanities Open*, 2(1), 100079, <https://www.sciencedirect.com/science/article/pii/S2590291120300681>.

³ World Health Organization (2020), ‘WHO Director-General’s opening remarks at the media briefing on COVID-19–5 February 2020’, <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---5-february-2020>.

⁴ World Health Organization (2020), ‘WHO Director-General opening remarks at the Member State Briefing on the COVID-19 pandemic evaluation – 9 July 2020’, <https://www.who.int/director-general/speeches/detail/who-director-general-opening-remarks-at-the-member-state-briefing-on-the-covid-19-pandemic-evaluation---9-july-2020>.

⁵ Gostin, L. O., Heywood, M., Ooms, G. et al. (2010), ‘National and global responsibilities for health’, *Bulletin of the World Health Organization*, 88: 719–19A, <https://www.who.int/bulletin/volumes/88/10/10-082636.pdf>.

⁶ Johnson, S. B. (2020), ‘Advancing Global Health Equity in the COVID-19 Response: Beyond Solidarity’, *Journal of Bioethical Inquiry*, 17: 703–07, <https://link.springer.com/article/10.1007/s11673-020-10008-9>.

inequality within and among countries'.⁷ However, as the progress of the pandemic has revealed significant deficiencies in political leadership and health system capacities in HICs and LMICs alike, solidarity has taken on new meaning. Tackling such a global crisis in terms of levelling and addressing asymmetries in power, resources, capacities and capabilities requires mutual assistance between countries motivated by a sense of shared duty and a collective responsibility to respond to common threats.

At the national level, one of the most important considerations for solidarity is how to support the most disadvantaged, who are disproportionately affected by COVID-19, in pursuit of equity. This is not only to ensure that none are left behind, but also to enable a more effective response. Equity refers to the fair opportunity for everyone to attain optimal health and wellbeing, regardless of demographic, social, economic or geographic circumstances.⁸ Health inequities thus result from more than just differences with respect to health determinants, they also signal a failure to avoid or overcome inequalities that affect fairness and the basic right to health. The pandemic has refocused global attention on the disparities in health outcomes and on the underlying political, social and economic drivers of disease and their negative impact on effective control of the virus. Solidarity that is grounded in an equity-based approach emphasizes the protection of the most vulnerable and susceptible communities and individuals as a priority in response efforts.

This paper recognizes that solidarity – at all levels of governance – is necessary for an effective response to this pandemic. Barriers to solidarity, be they political, scientific, financial or socio-cultural, hamper response efforts and potentially threaten, or at least prolong, a swift resolution and recovery for all countries and populations. It is thus imperative that barriers are identified and confronted, not only in this pandemic, but to prepare more effectively for future global crises.

The research for this paper assessed how the global community responded to the calls for greater solidarity across states and sectors in tackling the pandemic, and presents the views and perspectives of key stakeholders and experts in global health governance, health security, pandemic preparedness and response. The paper examines, in chapters 2, 4 and 6, the state of solidarity at different levels of governance – global, regional and national – and, in chapters 3 and 5, offers case studies on the COVAX mechanism and on the test to solidarity within the European Union (EU) in response to the pandemic. It concludes by setting out lessons learned and proposing ways of strengthening solidarity in preparation for the next pandemic or global health crisis.

⁷ United Nations (2015), 'Transforming our world: the 2030 Agenda for Sustainable Development', A/RES/70/1, 15 October 2015, https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

⁸ WHO (2021), 'Social determinants of health', <https://www.who.int/health-topics/social-determinants-of-health#:~:text=%E2%80%9Ch%20equity%20is%20defined%20as,economically%2C%20demographically%20or%20geographically>.

Methodology

The research findings presented here are based on a combination of one-to-one interviews with key stakeholders and experts from a range of organizations, and a review of academic, peer-reviewed literature and other sources.

Stakeholders were selected on the basis of a convenience sample of global health and pandemic governance experts, identified through the Chatham House Global Health Programme's network of colleagues, partners and collaborators. The initial sample was made up of 114 stakeholders, and was designed to optimize the balance between expertise, and geographic and gender diversity: 68 stakeholders were based in an HIC, and 46 in an LMIC; 62 stakeholders identified as male; and 52 as female. The skew towards HIC perspectives largely reflects the unequal distribution and concentration of global health knowledge and resources in HIC settings, where many of the major actors and players are headquartered. This is set out in Table 1, which shows stakeholders' organizational and regional affiliations. Although categorizing stakeholders by their physical location further adds to this skew (as many of those interviewed may have dual HIC and LMIC perspectives and expertise), this method of categorization was deemed the most representative of their position within the global health system.

Given the evolving nature of this research, the literature was reviewed purposively to support and supplement key insights and findings emerging retrospectively from the interviews. Both peer-reviewed academic and grey literature was searched between January and May 2021, using Google Scholar and Google databases respectively.

Of the 114 stakeholders initially contacted, 61 (54 per cent) were interviewed; 13 (11 per cent) declined owing to scheduling issues; and the remaining 40 (35 per cent) did not respond to follow-up contact. Of the 61 stakeholders interviewed, 40 were based in an HIC and 21 in an LMIC; 31 identified as male and 30 as female. The imbalance in HIC versus LMIC perspectives is acknowledged as an important limitation, as are gaps in regional diversity (see Table 1). Efforts to compensate for this imbalance were made in the literature review and writing phases where appropriate.

The interviews explored the extent to which different actors in the global health space have expressed and demonstrated solidarity; and the major factors enabling and undermining solidarity. The standard questions included the following:

- What is your understanding of solidarity?
- What has worked well in terms of solidarity?
- What has worked less well?
- What lessons can be learned from the experience of the pandemic to date in relation to building solidarity?

Interviewees were asked to reflect on solidarity at different levels of the governance architecture: at the global and multilateral level on solidarity between countries and international actors; at the regional level on solidarity between countries within the same region; and at the national level on solidarity within countries, namely between policymakers, the scientific and public health communities, and the population.

Interviews were conducted virtually between November 2020 and January 2021, and lasted up to one hour. Thus, another limitation of the research is that major findings are timebound, based on stakeholders’ perspectives over a particular period in the pandemic. The literature review, conducted retrospectively, helped to overcome this limitation.

All interviews were transcribed and analysed to draw out the major themes and patterns of observation. The interview transcripts were anonymized. Quotes used in this paper have been coded by organizational affiliation to protect the anonymity of interviewees (see Table 1).

Table 1. Distribution of interviewees by organizational affiliation, coding assigned to stakeholder groups in the research, and WHO regional classification

Organizational affiliation	Code	Number of interviewees	Region*					
			AFRO	EMRO	EURO	PAHO	SEARO	WPRO
Multilateral government organization	ML	11	–	–	9	–	1	1
Regional government organization	RL	11	3	1	1	2	2	2
National government organization	NL	5	2	–	–	1	1	1
For-profit organization	FP	3	–	–	2	–	–	1
Non-profit organization	NP	8	1	–	5	–	1	1
Research (or academic) institution	RI	21	1	–	8	7	–	5
Medical (or clinical) institution	MI	2	–	–	–	1	–	1
Total	–	61	7	1	25	11	5	12

*WHO regional classification: AFRO – Africa; EMRO – Eastern Mediterranean; EURO – Europe; PAHO – Americas; SEARO – Southeast Asia; WPRO – Western Pacific

02 Global solidarity and multilateral support

The pandemic has profoundly tested global solidarity, already under severe strain. Yet there have been notable examples where solidarity has been demonstrated, and some signs of progress as 2021 unfolds.

Key findings

- Heightened pre-existing geopolitical tensions and competition have undermined global solidarity and multilateral efforts to build and sustain solidarity among countries.
- Multilateral institutions and mechanisms did not have the necessary capacities, capabilities, power and resources to enforce solidarity norms.
- There have been remarkable instances of solidarity spurred by the pandemic. Scientists, businesses and other actors have worked together, often in innovative and spontaneous ways, to address the pandemic, but solidarity at the global political level has been weak and fragile.
- Countries have generally not worked together in solidarity at the global level and have resorted at times to trade restrictions and other actions that undermine solidarity in ways that have been detrimental to the global effort.
- The ACT-Accelerator and COVAX have been major platforms for global solidarity, but the ongoing production and equitable distribution of vaccines globally is currently the key test of global solidarity.

The pandemic developed at a time when global solidarity was at a very low ebb. The manifestations of this were well recognized before the pandemic struck. Gro Harlem Brundtland, the director-general of WHO during the severe acute respiratory syndrome (SARS) epidemic in 2003, has noted in this context:

A global crisis demands a global response. Yet the virus has struck at a time when the pre-existing crisis of multilateralism has made it significantly more difficult for leaders and institutions to respond effectively and save lives ... [I]t is important not to forget that the principle of multilateralism does not merely consist of the multilateral institutions that coordinate international cooperation. Multilateralism is also fundamentally about the promotion of global human solidarity.⁹

The pre-existing tensions in the international system became apparent early in the pandemic, notably the confrontation between the US and China, whereby the fact that the virus was first identified in China was used by the US – then under the presidency of Donald Trump – as a weapon in what some have termed a new ‘cold war’.¹⁰ Subsequently, WHO was caught in the crossfire as it was blamed by President Trump for failing in its response to the pandemic and for being too ‘China-centric’.¹¹ This culminated, in May 2020, in Trump giving notice of the US’s intention to withdraw from WHO (a decision that has since been reversed by President Joe Biden).

However, the pandemic has proved a severe test of global solidarity in several areas. The Independent Panel for Pandemic Preparedness and Response (Independent Panel) has noted that the international system’s response has been found wanting in many respects.¹² A feature of the COVID-19 story is the considerable ineffectiveness, especially during 2020, of the traditional mechanisms for bringing countries together to address a crisis – chief among them the UN, the G7 and the G20.

Solidarity and leadership on the global stage

Since the Second World War, effective leadership in global crisis situations has traditionally depended on an effective alliance being formed between the US and other major countries to shape the response. In the 2008 global financial crisis, the G20 stepped up to play a key part in mobilizing international action. In 2000, the G8 summit hosted by Japan at Okinawa played a pivotal role in catalysing the formation of the Global Fund to Fight AIDS, Tuberculosis and Malaria.¹³ One interviewee also referenced the 2015 Paris Agreement on climate change:

When the COP agreement in Paris and all the world leaders sat and they spoke, everyone knew that there were huge flaws in the agreement ... But there was a sense that governments had come together and made a commitment to do something

⁹ Brundtland, G. H. (2020), ‘John W. Holmes Memorial Lecture: The Future of Partnership and Multilateralism’, *Global Governance* 26: 545–55, https://brill.com/view/journals/gg/26/4/article-p545_3.xml.

¹⁰ Rachman, G. (2020), ‘A new cold war: Trump, Xi and the escalating US-China confrontation’, *Financial Times*, 5 October 2020, <https://www.ft.com/content/7b809c6a-f733-46f5-a312-9152aed28172>.

¹¹ BBC News (2020), ‘Coronavirus: Trump attacks ‘China-centric’ WHO over global pandemic’, 8 April 2020, <https://www.bbc.co.uk/news/world-us-canada-52213439>.

¹² Independent Panel (2021), ‘COVID-19: Make it the Last Pandemic’, May 2021, https://theindependentpanel.org/wp-content/uploads/2021/05/COVID-19-Make-it-the-Last-Pandemic_final.pdf.

¹³ The Global Fund (2017), ‘Japan and the Global Fund’, December 2017, https://www.theglobalfund.org/media/1493/donor_japan_report_en.pdf.

... And in the same way, what would we have expected to see now? Wouldn't you have expected to see a global – a true global – summit, where world leaders sat down and hammered out the solutions together? (ML-005)

Throughout 2020, the Trump administration's hostility towards almost all multilateral institutions did not just mean the absence of US support for collective action against COVID-19, as had been critical in past crises. US actions also actively undermined the prospects of a collective multilateral response to the pandemic. The same interviewee noted the positive actions of some leaders, mentioning, for example, President Emmanuel Macron of France and Germany's Chancellor Angela Merkel, but regretted that:

There has been a lack of cohesion at the global level and the global response has been poisonously distracted by politics and a lack of leadership from certain quarters. And we've had to fight against some of the most deadly and vicious attacks on multilateralism and on solidarity ... [W]e have sorely lacked global leadership [and] that has poisoned this to a point where the G7 can't agree on a statement, the G20 can hardly even meet at health ministers level, they can't agree on what, even, to say about this. (ML-005)

Nevertheless, with the Biden administration now in place in Washington, there are welcome signs of change, including the possibility that the G7 and G20 may take on a more active role. Strong leadership from many parts of the world, predominantly in LMICs, has also emerged to challenge the way scientific discoveries and innovations resulting from the pandemic are shared. For example, the COVID-19 Technology Access Pool (C-TAP) – discussed in detail later in this chapter – was first proposed by President Carlos Alvarado of Costa Rica, in a landmark effort to make COVID-19 health technologies 'universally available as global public goods', in partnership with WHO.¹⁴

Throughout 2020, US actions actively undermined the prospects of a collective multilateral response to the pandemic.

Yet many of the serious underlying problems in international relations remain. The dire shortage of vaccines in early 2021, as the pandemic resurged, underscored the fragility of international solidarity in times of crisis. Many interviewees attributed the lack of cohesion and coordination to failures in global political leadership. In the face of an unprecedented crisis, all governments were under pressure to assign the highest priority to protecting their own people by addressing the domestic epidemic. While this may be the primary duty of a government, the pandemic provided an opportunity and a justification for some countries to retreat from international obligations and focus on domestic concerns at the cost of demonstrating international solidarity.

¹⁴ World Health Organization (2020), 'International community rallies to support open research and science to fight COVID-19', WHO News Release, 29 May 2020, <https://www.who.int/news/item/29-05-2020-international-community-rallies-to-support-open-research-and-science-to-fight-covid-19>.

Interviewees additionally alluded to an accountability deficit in the multilateral system, which lacks the appropriate enforcement mechanisms to ensure that actors fulfil their political and financial pledges, and to ensure the integrity of multilateralism itself.

Solidarity with WHO

A puzzle that has generated much discussion was why most countries did not appear to heed sufficiently the advice offered by WHO when it declared a PHEIC at the end of January 2020, with Dr Tedros emphasizing that this was the time to demonstrate solidarity.¹⁵

Several factors that are not necessarily related to solidarity account for this inadequate response. However, the fact that most countries failed to respond as was needed to WHO's call for urgent action did demonstrate a lack of solidarity with that organization. While this failure was at least partly a result of lack of preparedness and readiness – for example, with insufficient personal protective equipment (PPE), testing capacity and capacity to trace and isolate – it was also a failure of political will to comply and engage with the actions required, both nationally and internationally, following a PHEIC declaration.¹⁶ When WHO finally declared the outbreak a pandemic on 11 March, Dr Tedros said that the organization was deeply concerned 'by the alarming levels of inaction'.¹⁷

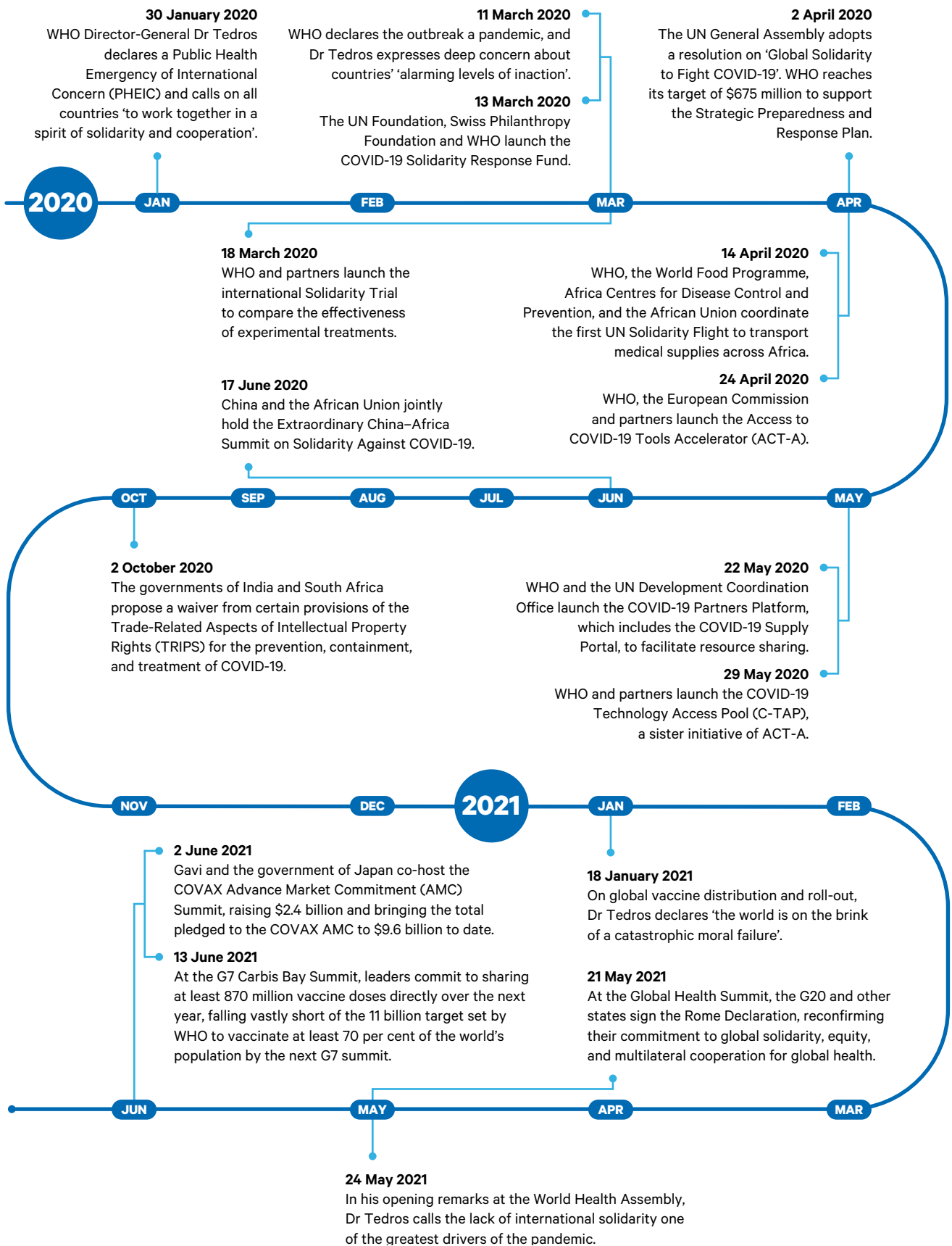
Nevertheless, while political leadership and cooperation with WHO has been disappointing at various points throughout the pandemic, there has been major institutional innovation to build and leverage international solidarity in fighting COVID-19 (see Figure 1). Interviewees remarked on the high levels of trust and networking between different international actors to advance and accelerate innovation, and the skilful leveraging of different partners' unique capabilities. Between March and May 2020, the multilateral system rapidly mobilized and established several mechanisms to facilitate greater scientific, technical and financial cooperation.

¹⁵ World Health Organization (2020), 'WHO Director-General's statement on IHR Emergency Committee on Novel Coronavirus (2019-nCoV)', 30 January 2020, <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.

¹⁶ Wenham, C., Kavanagh, M., Phelan, A., Rushton, S., Voss, M. and Halabi, S. (2021), 'Problems with traffic light approaches to public health emergencies of international concern', *The Lancet*, 12 April 2021, [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00474-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00474-8/fulltext).

¹⁷ World Health Organization (2020), 'WHO Director-General's opening remarks at the media briefing on COVID-19–11 March 2020', <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.

Figure 1. Timeline of key high-level statements and commitments to solidarity, January 2020–June 2021



ACT-A and COVAX

The Access to COVID-19 Tools Accelerator (ACT-A) is a global collaboration to accelerate development and production of and equitable access to COVID-19 tests, treatments and vaccines. Launched at the end of April 2020, ACT-A brings together governments, scientists, businesses, civil society, philanthropists and global health organizations, including WHO, UNICEF and the World Bank, the Coalition for Epidemic Preparedness Innovations (CEPI), the Foundation for Innovative New Diagnostics (FIND), Gavi – the Vaccine Alliance, the Global Fund, Unitaid, the Bill & Melinda Gates Foundation and Wellcome.

The vaccines pillar of ACT-A, the COVID-19 Vaccine Global Access Facility (COVAX), is a partnership between Gavi, CEPI and WHO. It aims to expedite the development and manufacture of COVID-19 vaccines and to guarantee fair and equitable access to them for every country in the world. As of mid-2021, COVAX had been joined by 190 countries, of which 98 are higher-income and 92 lower-income. There are two main modes by which countries interact with COVAX. So-called self-financing countries from higher income levels with the means to do so can request and pay for vaccine doses sufficient for 10–50 per cent of their population. For these countries, COVAX can serve as a critical insurance policy that will significantly increase their chances of securing vaccines, either if they have no bilateral advance purchases or if their bilateral deals fail to materialize for whatever reason. The other element of COVAX is the Advance Market Commitment (AMC), which supports access to COVID-19 vaccines for countries from lower income levels. Its objective is to ensure that the 92 LMICs with limited resources can get equal access to COVID-19 vaccines at the same time as higher-income, self-financing countries. Funding for this element is separate from the arrangements for self-financing participants, so the AMC is not cross-subsidized by the funds for vaccine purchase provided by self-financing participants. Instead, the AMC is funded mainly through contributions from donor country aid budgets, as well as from philanthropy and the private sector.

Despite a pledge of \$4 billion by the US as it joined COVAX, and further pledges of \$2.4 million at the COVAX AMC summit hosted by Japan on 2 June 2021,¹⁸ as of 25 June 2021 WHO estimated a funding gap of \$16.8 billion for ACT-A, of which \$0.9 billion related to COVAX.¹⁹

¹⁸ Gavi (2021), 'World leaders unite to commit to global equitable access for COVID-19 vaccines', 2 June 2021, <https://www.gavi.org/news/media-room/world-leaders-unite-commit-global-equitable-access-covid-19-vaccines>.

¹⁹ World Health Organization (2021), 'Access to COVID-19 tools funding commitment tracker', 25 June 2021, <https://www.who.int/publications/m/item/access-to-covid-19-tools-tracker>.

Table 2. Top 12 contributions to COVAX AMC (as of 23 June 2021)

Country/Organization	Amount \$ million	% total
US	3,500	36.2
Germany	1,097	11.4
Japan	1,000	10.4
UK	733	7.6
European Commission	489	5.1
Italy	470	4.9
Canada	384	4.0
Sweden	296	3.1
France	244	2.5
Gates Foundation	206	2.1
Saudi Arabia	153	1.6
Norway	141	1.5
Subtotal	8,713	90.2
Grand total	9,661	100.0

Source: Gavi (2021), 'Key Outcomes: COVAX AMC 2021', 10 May, <https://www.gavi.org/sites/default/files/covid/covax/COVAX-AMC-Donors-Table.pdf> (accessed 25 Jun. 2021).

By mid-July 2021, COVAX had delivered over 100 million doses to 135 countries. This leaves it far short of its target of 2 billion doses for 2021, mainly because its deliveries have been severely disrupted as a result of the vaccine export ban introduced by India in March 2021 as its domestic cases surged dramatically.²⁰

Most interviewees thought that ACT-A and COVAX had introduced a new dynamic in the global discussion, bringing together in one forum not just governments but also key international and philanthropic organizations and stakeholders including the private sector. These were considered important innovations, notably in building in concerns about global equity and access from the beginning, rather than as an afterthought. As one interviewee put it:

I think that the COVAX and the ACT-Accelerator facility has been absolutely fundamental to making sure that instead of, like with HIV, we add on at the end a sense of equity and access, that's been upfront as part of the driving mantra from day one. So, I think it's been revolutionary in that equity and access have been at the forefront rather than added on a decade later. (NP-020)

²⁰ Findlay, S., Peel, M. and Mancini, D. P. (2021), 'India blocks vaccine exports in blow to dozens of nations', *Financial Times*, 25 March 2021, <https://www.ft.com/content/5349389c-8313-41e0-9a67-58274e24a019>.

But some also questioned the development aid model underlying ACT-A. Interviewees acknowledged the limitations of this paradigm, and the present impact on countries' collective ability to engage meaningfully in solidarity-based approaches. As one pointed out:

The challenge is that the ACT-A narrative has never been able to go beyond the official development assistance (ODA) basket. (FP-009)

There is a group of 'usual suspect' donor governments and philanthropic bodies with a focus on global health that set the framework for initiatives like COVAX without adequately consulting all stakeholders, particularly those in LMICs. But the pandemic has overturned the assumption that richer countries are necessarily better prepared and better equipped to support collective efforts. Instead, it has exposed gaps in public health intelligence and infrastructure in many HICs – which, as one interviewee remarked, 'is ironic because that's what Europe and North America try to teach the world' (ML-036). Many interviewees recognized the pandemic as representing a pivotal shift in power relations and hierarchies within the current global health paradigm, and an opportunity for solidarity to truly manifest mutual assistance and support between countries.

I think we were talking about solidarity, but we were not living in a world of solidarity. We still have colonies in the minds of the big countries, to tell you the truth ... I mean, Latin American countries feel uncomfortable, they don't even trust [COVAX] because you have big countries, like the US or the UK, trying to do whatever they can for themselves. (RI-018)

It's always the same thing – the fact that an oligarchy of well-intentioned people is running the show. They are not making sure that around the table, people from all different and diverse backgrounds are consulted. It's always the same thing ... it's the rich philanthropists, it's the rich country, it's the rich industry, and some usual suspect of the civil society organizations, if they are invited. And so, when you talk to the low-middle-income country, they just say a) we're never consulted, then b) once the thing is done, we are told we've done something for you, and we're supposed to say 'thank you'. And it's an issue – right now, the global health agenda is being driven by a handful of people or agencies, and they're not consulting people. And I'm very, very happy that, actually, the African Union went and just made its own deal for 270 million vaccines because I think that what people are saying is that mode of operation cannot continue. You cannot think for us what is good for us. As long as you do that, you will be doomed to fail. (NP-058)

Rather than equating solidarity with a financial transaction between countries, several interviewees encouraged other, more sustainable forms of bilateral solidarity, such as technical assistance and training, data and information sharing, exchanging experiences and best practice, and technology transfers – activities currently missing from the global solidarity toolbox.

The issues concerning COVAX, vaccines and solidarity are further examined in Chapter 3.

Access to critical resources

The pandemic has revealed major vulnerabilities in the global supply chain and distribution infrastructure for medical supplies and equipment. Despite multilateral efforts to coordinate the logistics of supply and demand, for example by increasing purchasing power, procuring and protecting scarce resources, and establishing air traffic to deliver procured goods, countries have engaged in various actions that are deleterious to solidarity. These have included hoarding scarce resources, price gouging, cornering early supplies, hijacking global supply chains and controlling distribution unfairly. Hence, while most countries had the financial means to procure resources, many lacked the physical and material access to the pool of resources. As one interviewee said:

Even having the money, we were not able to make any negotiations or [buy] anything, because of this lack of solidarity. (RI-018)

In the initial stages of the pandemic, many countries reacted to the shortage of PPE when faced with rapidly rising hospital admissions by unilaterally banning exports of such items, while also taking measures to liberalize imports. The EU reacted to unilateral export bans by some member states by imposing EU-level authorizations for PPE exports in March 2020.²¹ Similarly, the US introduced extensive restrictions in April 2020.²² In that same month, the World Trade Organization (WTO) recorded that 80 countries had introduced export restrictions.²³ The directors-general of the WTO and WHO issued a joint statement on 20 April 2020:

Protecting lives is our top priority, and these efforts can be impeded by unnecessary disruptions to global trade and supply chains ... Global action, solidarity and international cooperation are more necessary than ever to address this health situation.²⁴

In many countries these restrictions were subsequently relaxed – for example, the EU measures were allowed to expire on 26 May 2020 – but in others the measures continued.²⁵ In January 2021 the US extended restrictions on several PPE exports until 30 June 2021, but these were not then further renewed.²⁶

One researcher from Latin America interviewed in November 2020 needed PPE for a research project with US collaborators:

²¹ European Commission (2020), 'Commission Implementing Regulation (EU) 2020/402', *Official Journal of the European Union*, 14 March 2020, https://eur-lex.europa.eu/eli/reg_impl/2020/402/oj#d1e150-1-1.

²² Federal Emergency Management Agency, Department of Homeland Security (2020), 'Prioritization and Allocation of Certain Scarce or Threatened Health and Medical Resources for Domestic Use', *Federal Register* 85(70), 10 April 2020, <https://www.federalregister.gov/documents/2020/04/10/2020-07659/prioritization-and-allocation-of-certain-scarce-or-threatened-health-and-medical-resources-for>.

²³ World Trade Organization (2020), 'Export Prohibitions and Restrictions', 23 April 2020, https://www.wto.org/english/tratop_e/covid19_e/export_prohibitions_report_e.pdf.

²⁴ World Health Organization (2020), 'Joint statement by WTO Director-General Roberto Azevêdo and WHO Director-General Tedros Adhanom Ghebreyesus', 20 April 2020, <https://www.who.int/news/item/20-04-2020-joint-statement-by-wto-director-general-roberto-azevedo-and-who-director-general-tedros-adhanom-ghebreyesus>.

²⁵ International Trade Centre (2021), 'COVID-19 Temporary Trade Measures', <https://macmap.org/en/covid19> (accessed 12 May 2021).

²⁶ Federal Emergency Management Agency (2021), 'Export Allocation Rule on Medical Supplies and Equipment for COVID-19', 1 July 2021, <https://www.fema.gov/fact-sheet/allocation-rule-personal-protective-equipment-exports>.

The [US researchers] told me, 'Don't worry, we are going to be sending, because we have a lot. We have enough, we have so many, so we can send it.' So, we had everything prepared to receive it, we did all the paperwork with customs and then they called me this morning and said, 'You know, we have a regulation that doesn't allow us to ship any PPEs to Latin America.' Everything has to stay in the US, just in case, and I find this incredible ...

I have not seen, unfortunately, real solidarity because of the political nature of most of the responses and because of this resource hoarding that we've seen, for example we have to buy ventilators from China, but in order to get them from China, they had to stop in the US and if the plane stops there, the countries take them for themselves. (RI-018)

Export restrictions are a prime example of putting one's own country first and failing to demonstrate solidarity with other countries. Apart from obviously affecting countries that were previously importers, production systems depend on international supply chains that are disrupted by export controls, not to mention the likelihood of beggar-thy-neighbour retaliation. Restricting the exports of raw materials required to manufacture PPE (e.g. textiles) threatens production in third countries. Thus export restrictions can fuel shortages. Nevertheless, the EU once again resorted to temporary export authorizations when faced with shortfalls in its vaccine deliveries in January 2021. It required EU member states to submit to the EU Commission proposed export authorizations, and to decide on the request in accordance with the Commission's opinion.²⁷ As already noted, in March 2021 India, the largest supplier of vaccines for COVAX recipients, imposed a ban of unspecified duration on vaccine exports. Vaccine producers have also raised concerns about the possibility of export restrictions affecting their access to needed inputs. These include the implications of the use of the Defense Production Act in the US to secure inputs for US producers to the possible detriment of producers elsewhere.²⁸

Solidarity in science

Science, in all its different disciplines, has been central to the fight against the pandemic. Sharing the fruits of scientific endeavour as widely and as rapidly as possible is critical in a fast-moving pandemic where speed is of the essence. Scientists around the world have shown solidarity in generating an unprecedented level of research publications – more than 450,000 research publications related to COVID-19 were recorded by May 2021.²⁹ Moreover, there has been a push for wider and more timely access. Major scientific journals (and news outlets) have shown solidarity by removing articles on COVID-19 from paywalls for the duration of the pandemic, and have significantly reduced the time from submission to publication.³⁰ There has also been a flourishing of preprints, articles published

²⁷ European Commission (2021), 'Commission Implementing Regulation (EU) 2021/111', 29 January 2021, https://eur-lex.europa.eu/eli/reg_impl/2021/111/oj.

²⁸ PTI (2021), 'Serum Institute seeks govt's intervention over import of COVID vaccine raw material from US', *Outlook*, 8 March 2021, <https://www.outlookindia.com/newscroll/serum-institute-seeks-govts-intervention-over-import-of-covid-vaccine-raw-material-from-us/2042859>.

²⁹ Dimensions (2021), 'COVID-19 Report: Publications, Clinical Trials, Funding', <https://reports.dimensions.ai/covid-19>.

³⁰ Aviv-Reuven, S. and Rosenfeld, A. (2020), 'Publication Patterns' Changes due to the COVID-19 Pandemic: A longitudinal and short-term scientometric analysis', Cornell University, 6 October 2020, preprint at <https://arxiv.org/abs/2010.02594>.

in a large number of repositories such as bioRxiv and medRxiv, as first drafts before peer review. This has meant that scientific results of consequence for response policies have been disseminated much earlier than would normally be the case.

The solidarity expressed through the widespread international sharing of genomic sequences has been beneficial to the pandemic response in a number of ways. The Global initiative on sharing all influenza data (GISAID) was established in 2008 for the rapid sharing of data on influenza viruses, but is now the main global repository for coronavirus sequences. The platform fosters collaboration among researchers worldwide. By July 2021 it had posted more than 2 million full genome sequences from all over the world. WHO's Chief Scientist, Dr Soumya Swaminathan, has described it as a game-changer.³¹ The global sharing of gene sequences is an excellent example of scientific collaboration and open sharing that has allowed scientists and policymakers to generate appropriate responses in real time. For example, vaccine producers are able to work immediately on adjusting their vaccines to make them effective against new variants.³²

The global sharing of gene sequences is an excellent example of scientific collaboration and open sharing that has allowed scientists and policymakers to generate appropriate responses in real time.

Much of this enhanced sharing of research occurred spontaneously, reflecting the actions of researchers and publishers. But WHO has also played a wider role in seeking to accelerate and coordinate the activities of researchers around the world to focus on the priorities of combating the current pandemic and preparedness planning for future epidemics. Building on the scientific collaboration platforms it initiated during the 2003 SARS epidemic, WHO has fostered solidarity among scientists by convening meetings to discuss appropriate responses to the pandemic. For example, in February 2020 it organized a meeting of approximately 400 researchers from around the world to contribute to building a Global Research Roadmap.³³ In January 2021 it convened meetings of scientists to identify knowledge gaps and set research priorities for vaccines against the

³¹ Swaminathan, S. (2020), 'The WHO's chief scientist on a year of loss and learning', *Nature*, 588, 24/31 December 2020: pp. 583–85, <https://media.nature.com/original/magazine-assets/d41586-020-03556-y/d41586-020-03556-y.pdf>.

³² *The Economist* (2021), 'Enigma variations: Will variants of SARS-CoV-2 make vaccination harder?', 4 February 2021, <https://www.economist.com/science-and-technology/2021/02/06/will-variants-of-sars-cov-2-make-vaccination-harder>.

³³ World Health Organization (2020), *A Coordinated Global Research Roadmap: 2019 Novel Coronavirus*, March 2021, Geneva: WHO Headquarters in Geneva, https://www.who.int/docs/default-source/coronaviruse/coordinated-global-research-roadmap.pdf?sfvrsn=21b0f5c4_1&download=true.

virus,³⁴ and to expand scientific collaboration in the monitoring of emerging variants of SARS-CoV-2.³⁵ These meetings included, respectively, more than 2,800 scientists from 130 countries, and 1,750 experts from 124 countries.

In addition, in March 2020 WHO launched the ‘Solidarity’ clinical trials. This was in response to its concerns about the fragmented approach to the science: a large number of small trials with different methodologies were being undertaken around the world that failed to generate adequate evidence to demonstrate effectiveness. The first ‘Solidarity’ trial was one of the largest international randomized trials for COVID-19 treatments, enrolling almost 12,000 patients in 500 hospital sites across 30 countries. The first results, announced in October 2020, demonstrated that all four treatments the trial evaluated had little or no effect on patients, including a therapy promoted by the then US president.³⁶

While collaboration is an important aspect of demonstrating international solidarity, national efforts can demonstrate solidarity by making new knowledge available to the world as a global public good. For example, in June 2020 the RECOVERY trial in the UK found the first effective treatment for COVID-19 – dexamethasone.³⁷ In February 2021 it found that adding the monoclonal antibody tocilizumab reduced mortality by up to one half.³⁸ The results from both studies can be immediately applied in treatment protocols throughout the world. Similarly, knowledge gained from the experience of specific countries and shared with the world, such as Iceland’s and Japan’s insights into ‘superspreading’ events, and Japan’s demonstration that a ‘cluster-busting’ approach – which focused on preventing a cluster of infections linked to a single event from progressing to generalized community transmission by identifying clusters and targeting contact tracing and testing resources at them – was effective in controlling outbreaks, rapidly informed responses in the rest of the world.

Another example of national effort conferring global benefit is the investments that high-income governments and others made in vaccine development in order to secure doses for their own populations. This has rightly led to criticisms about ‘vaccine nationalism’. Yet, paradoxically, it is these investments, motivated principally by self-interest, that have enabled a number of effective vaccines to be developed and authorized in record time. Without them, the

³⁴ World Health Organization (2021), ‘Scientists tackle vaccine safety, efficacy and access at global R&D forum’, News release, 16 January 2021, <https://www.who.int/news/item/16-01-2021-scientists-tackle-vaccine-safety-efficacy-and-access-at-global-r-d-forum>.

³⁵ World Health Organization (2021), ‘Global scientists double down on SARS-CoV-2 variants research at WHO hosted forum’, News release, 12 January 2021, <https://www.who.int/news/item/12-01-2021-global-scientists-double-down-on-sars-cov-2-variants-research-at-who-hosted-forum>.

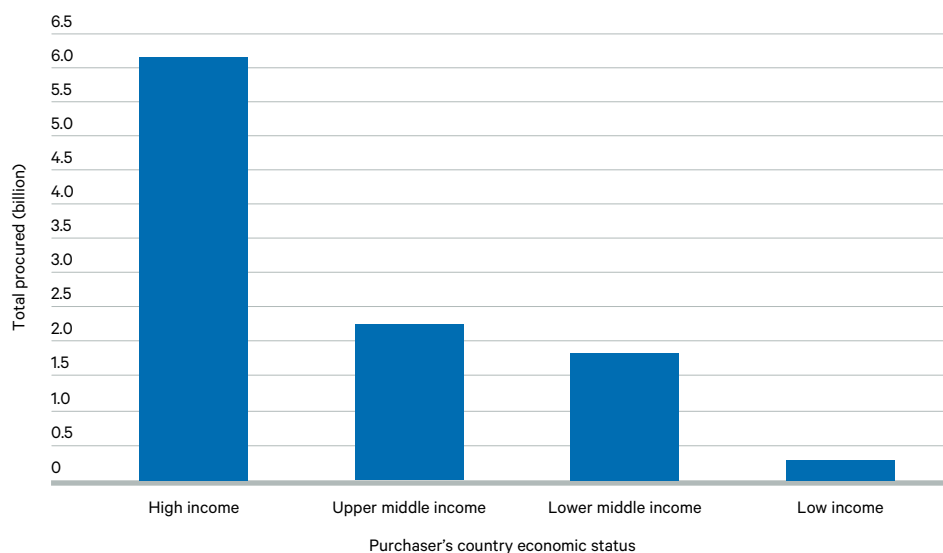
³⁶ WHO Solidarity Trial Consortium (2021), ‘Repurposed Antiviral Drugs for Covid-19 – Interim WHO Solidarity Trial Results’, *New England Journal of Medicine*, 384:497–511, <https://www.nejm.org/doi/full/10.1056/NEJMoa2023184>.

³⁷ RECOVERY (2020), ‘Low-cost dexamethasone reduces death by up to one third in hospitalised patients with severe respiratory complications of COVID-19’, 16 June 2020, <https://www.recoverytrial.net/news/low-cost-dexamethasone-reduces-death-by-up-to-one-third-in-hospitalised-patients-with-severe-respiratory-complications-of-covid-19>.

³⁸ RECOVERY (2020), ‘Tocilizumab reduces deaths in patients hospitalised with COVID-19’, 11 February 2021, <https://www.recoverytrial.net/news/tocilizumab-reduces-deaths-in-patients-hospitalised-with-covid-19>.

rest of the world would not have had potential access to the range of vaccines now becoming available. Figure 2 shows the distribution of vaccine purchases by country income level.

Figure 2. Confirmed number of doses procured by country income-level classification (as of 9 July 2021)



Source: Launch and Scale Speedometer (2021), 'Tracking COVID-19 vaccine purchases across the globe', 9 July 2021, <https://launchandscalefaster.org/covid-19/vaccinepurchases> (accessed 9 Jul. 2021).

Pharmaceutical companies and solidarity

Some biopharmaceutical companies have worked together in ways that would have been unthinkable before the crisis. In September 2020 the Bill & Melinda Gates Foundation and 16 pharmaceutical companies committed themselves to expanded global access to vaccines, therapeutics and diagnostics for COVID-19. The companies were AstraZeneca, Bayer, bioMérieux, Boehringer Ingelheim, Bristol Myers Squibb, Eisai, Eli Lilly, Gilead, GSK, Johnson & Johnson, Merck KGaA, Merck/MSD, Novartis, Pfizer, Roche and Sanofi. These commitments included striving for global availability, enabling affordability in lower-income countries and supporting equitable distribution of these innovations globally, including global mechanisms such as COVAX.³⁹

In practice, companies have adopted different strategies in respect of provisions for global access. AstraZeneca, in collaboration with Oxford University, has made commitments to ensure global access. In June 2020 it agreed a commitment of \$750 million with COVAX to support the manufacture, procurement and distribution of 300 million doses of the vaccine, with delivery starting by the end of the year. In addition, it reached a licensing agreement with the Serum Institute of India (SII) to supply one billion doses for LMICs. Both SII and SK Bioscience in

³⁹ Life Science Companies and the Bill & Melinda Gates Foundation (2020), 'Commitments to Expanded Global Access for COVID-19 Diagnostics, Therapeutics, and Vaccines', 30 September 2020, <https://www.jnj.com/latest-news/life-sciences-gates-foundation-commitments>.

South Korea are supplying the vaccine for distribution through COVAX. AstraZeneca has said it is collaborating with more than 20 partners in more than 15 countries to accelerate production and supply.⁴⁰

AstraZeneca has also committed to supply doses at no profit during the pandemic, although there is some uncertainty about what this means in practice, given the variation in prices charged in different countries.⁴¹ As a result of this strategy, and this vaccine's favourable cold-chain requirements, in many countries it is regarded as a 'workhorse' vaccine capable of reaching populations that are difficult to serve, compared with those with more rigorous cold-chain requirements. Johnson & Johnson, whose vaccine cold-chain storage requirements, similar to those of the AstraZeneca vaccine, are also easier to achieve, has also made a commitment to provide its single-dose vaccine on a no-profit basis. The company has agreed to supply COVAX with up to 200 million doses by the end of 2021.⁴² Similar agreements with COVAX have been made by Novavax (up to 1.1 billion doses)⁴³ and Moderna (up to 500 million doses).⁴⁴

Other companies have made no such explicit commitments on global access and affordability, although it is possible they may be charging less for vaccines than their normal pricing strategies would dictate. Nevertheless, Pfizer and Moderna have projected COVID-19 vaccine sales in 2021 of \$26 billion and \$18 billion respectively.⁴⁵ It has been estimated that in 2021 Pfizer and its partner BioNTech will make profits from their vaccine of \$4 billion each, and Moderna \$8 billion.⁴⁶

Another impact of COVID-19 has been companies' much greater willingness to collaborate with each other to address the crisis, on a scale unprecedented in normal times. In both the US and the EU, competition authorities have relaxed rules on cooperation between companies to tackle COVID-19. Examples include Sanofi and Novartis stepping forward to manufacture the Pfizer-BioNTech vaccine, and Sanofi and Merck also preparing to manufacture the Johnson & Johnson vaccine. There are many other examples of collaboration around the discovery and production of vaccines and monoclonal antibodies.⁴⁷

⁴⁰ AstraZeneca (2021), 'Innovating Production and Manufacture to meet the Challenge of COVID-19', January 2021, <https://www.astrazeneca.com/what-science-can-do/topics/technologies/innovating-production-and-manufacture-to-meet-the-challenge-of-covid-19.html>.

⁴¹ Transparency International (2021), 'For Whose Benefit? Transparency in the development and procurement of COVID-19 vaccines', <http://ti-health.org/wp-content/uploads/2021/05/For-Whose-Benefit-Transparency-International.pdf>.

⁴² Gavi (2021), 'Gavi signs agreement with Johnson & Johnson for supply of its COVID-19 vaccine to COVAX', 21 May 2021, <https://www.gavi.org/news/media-room/gavi-signs-agreement-johnson-johnson-supply-its-covid-19-vaccine-covax>.

⁴³ Gavi (2021), 'Gavi signs memorandum of understanding with Novavax on behalf of COVAX Facility', 18 February 2021, <https://www.gavi.org/news/media-room/gavi-signs-memorandum-understanding-novavax-behalf-covax-facility>.

⁴⁴ Gavi (2021), 'Gavi signs agreement with Moderna to secure doses on behalf of COVAX Facility', 3 May 2021, <https://www.gavi.org/news/media-room/gavi-signs-agreement-moderna-secure-doses-behalf-covax-facility>.

⁴⁵ Kollewe, J. (2021), 'Pfizer forecasts \$26bn from annual sales of Covid-19 vaccine', *Guardian*, 4 May 2021, <https://www.theguardian.com/business/2021/may/04/pfizer-forecasts-26bn-annual-sales-covid-vaccine>.

⁴⁶ Corporate Watch (2021), 'Vaccine Capitalism: A run-down of the huge profits being made from Covid-19 vaccines', 18 March 2021, <https://corporatewatch.org/vaccine-capitalism-a-run-down-of-the-huge-profits-being-made-from-covid-19-vaccines/#sdenote1sym>.

⁴⁷ Branswell, H. (2021), 'GSK joins forces with CureVac to manufacture its Covid-19 vaccine – and to develop another', *STAT*, 3 February 2021, <https://www.statnews.com/2021/02/03/gsk-joins-forces-with-curevac-to-manufacture-its-covid-19-vaccine-and-to-develop-another>.

Intellectual property: absence of solidarity

How intellectual property affects both biomedical innovation and access to the products of that innovation has for long been contentious. The issue came to the fore in relation to access to HIV medicines around the turn of the century. In response to public and activist pressure, ways were found to allow generic producers of HIV treatments to produce medicines for LMICs at a small fraction of the price charged in wealthy countries by the originator companies. A later initiative, the Medicines Patent Pool, was established to license patents for HIV medicines from their originators in order to sub-license them to multiple generic manufacturers, thereby increasing availability and driving down prices through competition in LMICs. Yet it took more than a decade for HIV medicines to become widely available in LMICs.

With the successful development of vaccines, there is a repeat of calls to relax intellectual property rules in order to increase the availability and affordability of vaccines.

A similar critical moment has now been reached in the COVID-19 pandemic. With the successful development of vaccines, there is a repeat of calls to relax intellectual property rules in order to increase the availability and affordability of vaccines (and indeed other relevant technologies) in LMICs. One example is the COVID-19 Technology Access Pool (C-TAP) launched by WHO in the Solidarity Call to Action in May 2020.⁴⁸ C-TAP seeks to accelerate product development and manufacturing of tools needed to combat COVID-19 through the open sharing of intellectual property, data and know-how, thereby contributing to wider availability and more affordable global access. So far, however, C-TAP has not become operational. Its support base is narrow – predominantly comprising about 40 governments, mainly LMICs. Key governments in HICs have been lukewarm about the concept. The pharmaceutical industry, a necessary participant if C-TAP is to succeed, has, for the most part, seen the initiative as unnecessary and misguided by implying that intellectual property rights are barriers to research and development, public–private collaborations or access to COVID-19 products.⁴⁹ WHO and countries backing the initiative gave C-TAP a further call to action at the World Health Assembly in May 2021.

⁴⁸ World Health Organization (2020), 'Making the response to COVID-19 a public common good: Solidarity Call to Action', 1 June 2020, <https://www.who.int/initiatives/covid-19-technology-access-pool/solidarity-call-to-action>.

⁴⁹ IFPMA (2020), 'Statement on the "Solidarity Call to Action to realize equitable global access to COVID-19 health technologies through pooling of knowledge, intellectual property and data"', 28 May 2020, <https://www.ifpma.org/resource-centre/ifpma-statement-on-the-solidarity-call-to-action-to-realize-equitable-global-access-to-covid-19-health-technologies-through-pooling-of-knowledge-intellectual-property-and-data>.

Some companies have taken voluntary initiatives to make their intellectual property freely available during the pandemic. For example, several offered to share their ventilator designs early in the pandemic in order to allow other manufacturers to expand production. Moderna has pledged not to enforce its COVID-19-related patents against those making vaccines intended to combat the pandemic. Other companies have signed up to the Open COVID pledge, a mechanism whereby participants make available selected patents on a non-exclusive, royalty-free, worldwide licence for a time-limited period. However, there are no data on how effective these initiatives have been in terms of expanding production, availability and access to needed products. Those opposed to the relaxation of intellectual property rules during the pandemic point out that issues such as know-how, technical capacity or access to biological materials are more critical constraints in expanding production than intellectual property rights. Such constraints particularly apply in the case of vaccines and monoclonal antibodies. One interviewee explained the issue as follows:

I think, to be honest, the challenge is that the limiting factor is not the licences – it’s really now identifying potential production capabilities that can produce large-scale vaccines in BSL-3 facilities that are approved internationally for production of vaccines. And very few countries have that capacity, no low-income country has that capacity, and only a few middle-income countries. India is, of course, one exception, and there has been tech transfer and licence agreements with the Serum Institute and a couple of other Indian manufacturers. So, it’s really not the licensing that is the limiting factor. (RI-027)

In October 2020, South Africa and India submitted a proposal to the WTO to waive some provisions of the TRIPS agreement⁵⁰ for the duration of the pandemic.⁵¹ This would permit countries to change their domestic legislation to allow the free use of intellectual property for the development and manufacture of products to fight COVID-19. Formal and informal discussions in the WTO have reflected the reservations expressed in relation to C-TAP. A revised version of the waiver proposal was submitted to the WTO in May 2021, sponsored by 62 members and supported by about 100 countries.⁵² Governments opposed to the waiver argue ‘that there is no concrete indication that intellectual property rights (IPRs) have been a genuine barrier to accessing COVID-19 related medicines and technologies, and that IP was only one aspect of many that affected the manufacture and distribution of the new vaccines’.⁵³

⁵⁰ WTO Agreement on Trade-Related Aspects of Intellectual Property Rights.

⁵¹ World Trade Organization (2020), ‘Waiver from certain provisions of the TRIPS Agreement for the prevention, containment and treatment of COVID-19’, IP/C/W/669, 2 October 2020, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/IP/C/W669.pdf&Open=True>.

⁵² World Trade Organization (2021), ‘Waiver from certain provisions of the TRIPS Agreement for the prevention, containment and treatment of COVID-19’, IP/C/W/669/Rev.1, 25 May 2021, <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/IP/C/W669R1.pdf&Open=True>.

⁵³ World Trade Organization (2020), ‘Members to continue discussion on proposal for temporary IP waiver in response to COVID-19’, 10 December 2020, https://www.wto.org/english/news_e/news20_e/trip_10dec20_e.htm.

A campaign for the People's Vaccine successfully mobilized former world leaders and others to call for a temporary TRIPS waiver specific to vaccines,⁵⁴ and on 5 May 2021, to the surprise of many, the US government announced its support for negotiations in the WTO on such a waiver. Yet countries in the EU continued to oppose the move while criticizing the US and the UK for failing to export any vaccines, in contrast to the EU record.⁵⁵

Moreover, while governments all over the world, not just in HICs, are falling over themselves to offer bilateral deals to companies to purchase vaccines, including by paying premium prices, companies are not as willing to enter into less lucrative deals for global licensing of intellectual property as they were prepared to do for HIV medicines with the Medicines Patent Pool. In respect of therapies, the two treatments so far demonstrated to be effective are no longer protected by intellectual property rules.

⁵⁴ People's Vaccine Alliance (2021), 'Open Letter: Former Heads of State and Nobel Laureates Call on President Biden To Waive Intellectual Property Rules for COVID Vaccines', 14 April 2021, <https://peoplesvaccinealliance.medium.com/open-letter-former-heads-of-state-and-nobel-laureates-call-on-president-biden-to-waive-e0589edd5704>.

⁵⁵ Casert, R. and Hatton, B. (2021), 'EU says US stand on patent virus waiver is no 'magic bullet'', APNews, 8 May 2021, <https://apnews.com/article/europe-technology-patents-coronavirus-pandemic-health-570081abd85da67f009f24ecda7cd998>.

03

Case study 1:

COVAX, vaccines and solidarity

For COVAX to work as its originators intended, it needed all governments to buy into it, rather than making their own deals with potential producers.

COVAX is a new mechanism which can be seen as an expression of global solidarity – to ensure there is a fair global distribution of vaccines. As such, it represents an important institutional innovation relative to previous pandemics. One interviewee compared the current experience with the 2009 H1N1 (swine flu) pandemic, where each country purchased the vaccine on its own account and no mechanisms existed for systematically rolling out vaccines to LMICs:

The 2009 pandemic was an example of how not to do it, where [high-income] countries had already got sleeping contracts ... So, the flu example is where it went wrong, even if you were in an industrialized country. If you were a middle-income country, you came a bit lower down the list, and if you were a low-income country, you really had very little chance of getting pandemic flu vaccine. (RI-012)

For COVAX to work as its originators intended, it essentially needed all governments to buy into it, rather than making their own deals with potential producers. There are a number of reasons why this ideal vision of a universal COVAX has not been achieved. The idea was conceived at the same time as several countries were already building their bilateral vaccine portfolios. While some of these vaccine strategies did encompass an international dimension (e.g. the EU and the UK), the primary objective was to secure vaccines for their own populations. There was, therefore, always an inevitable tension,

even contradiction, between the expressions of support for equitable global access by governments and their simultaneous pursuit of bilateral deals for domestic populations.

The inequity introduced by the bilateral purchases, mainly by HICs, inevitably meant that COVAX was behind in the queue, along with direct purchasers from LMICs. As one interviewee explained:

Part of the problem is that by the time the mechanism was set up ... bilateral deals were beginning to be put in place by the high-income countries. They therefore wanted to participate but just to use the system as a back-up plan to their bilateral deals and therefore only wanted to participate through an optional scheme. And so they insisted on having optionality, which limited the resources flowing into COVAX and meant that it was harder for COVAX to make firm order commitments to the manufacturers. This diminished the importance of the mechanism to manufacturers when they could go out and just sell directly to high-income countries in smaller volumes and at higher prices. The effectiveness of the mechanism has been eroded because wealthy countries believed acting alone in their own interest was more efficient than acting through the solidarity mechanism. I think that one of the lessons for the future would be that the solidarity mechanism will work best if it is introduced absolutely at the beginning and moves fast. (NP-037)

Just as individual countries have invested in a portfolio of vaccine candidates, so COVAX with full support from HICs could have invested in a wider portfolio of candidates, thereby sharing the risk of failure more efficiently than was the case with the array of bilateral portfolios countries had developed. In principle, such an arrangement could have been fairer, more cost-effective and more efficient than multiple bilateral portfolios, and could have facilitated earlier access by the majority of countries not in a position to make their own deals. An interviewee noted:

The US has secured access to 800 million doses of vaccine. It's vastly more than they could ever possibly use and that's all supply that is now being kept from countries that are not going to have much, if any, supply. It's a vast misallocation of a scarce resource that will result in excess death, prolongation of the pandemic, and heightened economic damage. (NP-037)

The issue of vaccine allocation within and between countries has brought into sharp focus the meaning and importance of solidarity, and it can be argued that globally equitable access to vaccines will be the ultimate test of global solidarity in 2021 and beyond. Dr Tedros expressed very strong concerns in opening the virtual meeting of WHO's Executive Board in January 2021:

It's right that all governments want to prioritize vaccinating their own health workers and older people first. But it's not right that younger, healthier adults in rich countries are vaccinated before health workers and older people in poorer countries ... the world is on the brink of a catastrophic moral failure ... Vaccine equity is not just a moral imperative, it is a strategic and economic imperative ... It's not too late.⁵⁶

⁵⁶ World Health Organization (2021), 'WHO Director-General's opening remarks at 148th session of the Executive Board', 18 January 2021, <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-148th-session-of-the-executive-board>.

His concern was motivated by the large number of bilateral deals, mainly by HICs, securing up to 500 per cent more vaccines than their populations needed. As the failure rate of vaccine development has been much lower than expected, most of these countries will be left with sizeable surpluses once they have vaccinated their populations. On 22 February 2021, while welcoming the additional financial contributions from the G7, Dr Tedros noted that ‘if there are no vaccines to buy, money is irrelevant’. Additional financial contributions could not, in the short term, expand the available vaccine supply, so equitable global distribution according to public health need required countries to share their surplus doses ‘immediately’.⁵⁷ His key point was that equity and solidarity demanded that HICs release some of their surplus vaccines as soon as they had secured enough vaccines for their elderly and most vulnerable people, rather than waiting until their entire populations had been vaccinated.

Several countries have responded to this appeal. These include France, Spain, New Zealand, Sweden and Norway. In May 2021 the EU committed to share 100 million doses by the end of 2021.⁵⁸ At the COVAX AMC hosted by Japan in June 2021, Belgium, Denmark and Japan offered doses, and there were further commitments by Spain and Sweden, bringing the total to 54 million doses.⁵⁹ In June 2021, at the G7 Leaders’ Summit held at Carbis Bay, UK, the group’s member countries together committed to supply at least 870 million vaccine doses via dose-sharing over the next year. According to the summit communiqué, this would mean that the G7 members’ financial contributions to COVAX and commitments to direct dose-sharing have facilitated 2 billion doses since the start of the pandemic.⁶⁰ However, Dr Tedros had told the summit that to end the pandemic the aim should be to vaccinate at least 70 per cent of the world’s population – requiring some 11 billion doses – by the time of the next G7 summit.⁶¹ Notably, too, the G7 dose-sharing commitments more or less match the amounts COVAX is itself committed to supply to its mainly high-income self-financing participants in 2021.⁶²

The slowness of the vaccine roll-out in LMICs has opened the way for the manufacturers of Russian and Chinese vaccines to exercise so-called ‘vaccine diplomacy’. Although China reportedly pledged 10 million doses to COVAX, as of mid-July 2021 it had donated 26 million doses bilaterally. In May 2021, at the World Health Assembly, China reaffirmed its intention to support access bilaterally but did not announce plans to supply vaccines through COVAX.

⁵⁷ World Health Organization (2021), ‘WHO Director-General’s opening remarks at the media briefing on COVID-19–22 February 2021’, 22 February 2021, <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19-22-february-2021>.

⁵⁸ European Council (2021), ‘Special meeting of the European Council (24 and 25 May 2021) – Conclusions’, 25 May 2021, <https://www.consilium.europa.eu/media/49791/2425-05-21-euco-conclusions-en.pdf>.

⁵⁹ Gavi (2021), ‘World leaders unite to commit to global equitable access for COVID-19 vaccines’, 2 June 2021, <https://www.gavi.org/news/media-room/world-leaders-unite-commit-global-equitable-access-covid-19-vaccines>.

⁶⁰ G7 United Kingdom 2021 (2021), ‘Carbis Bay G7 Summit Communiqué: Our Shared Agenda for Global Action to Build Back Better’, 13 June 2021, <https://www.g7uk.org/wp-content/uploads/2021/06/Carbis-Bay-G7-Summit-Communique-PDF-430KB-25-pages-5.pdf>.

⁶¹ World Health Organization (2021), ‘Director-General’s opening remarks at the G7 Summit – 12 June 2021’, <https://www.who.int/director-general/speeches/detail/director-general-s-opening-remarks-at-the-g7-summit---12-june-2021>.

⁶² Usher, A. D. (2021), ‘A beautiful idea: how COVAX has fallen short’, *The Lancet* 397(10292): pp. 2322-2325, [https://doi.org/10.1016/S0140-6736\(21\)01367-2](https://doi.org/10.1016/S0140-6736(21)01367-2).

In addition, it has sold over 850 million doses around the world.⁶³ Russia has donated or sold more than 380 million doses to 20 countries.⁶⁴ India has supplied 66 million doses in grants and commercial supplies to 95 countries, including via COVAX.⁶⁵ In March 2021 the ‘Quad’ countries (the US, Japan, India and Australia) announced a vaccine partnership to expand safe and effective COVID-19 vaccine manufacturing in 2021, and to assist countries in the Indo-Pacific region with vaccination.⁶⁶ Whatever their political or economic motivations, these countries are contributing to filling the vital gap left in LMICs by the slow roll-out of COVAX and the hoarding of surplus doses in HICs.⁶⁷ On the other hand, the abrupt cessation of India’s vaccine exports in March 2021 has severely disrupted not just COVAX but also countries’ ability to complete their vaccination programmes. For example, Bhutan remarkably vaccinated 90 per cent of its adult population in two weeks in March–April 2021 using donations from India; and it only now, in July, appears to have secured enough second doses from other countries, including 250,000 doses donated by Denmark.

At the heart of the controversy over vaccine distribution are two important aspects of the notion of solidarity. On the one hand there is the moral aspect – solidarity is about treating people equitably according to relative need irrespective of their social and economic status. In the context of vaccines, equitable treatment means distributing them, within and between countries, according to the assessed public health priorities rather than ability to pay or other criteria such as political influence.

It is in the interest of every country, richer and poorer, that vaccines be distributed according to public health need, both within and between countries.

On the other hand, solidarity can be about efficiency linked to enlightened self-interest. Allocating vaccines according to public health need also means allocating them in ways that will mitigate the pandemic most effectively by protecting the most vulnerable across the world to reduce mortality and transmission and hastening the time when societies and economies everywhere can be revived. It is therefore in the interest of every country, richer and poorer, that vaccines be distributed according to public health need, both within and between countries.

⁶³ Bridge (2021), ‘China COVID-19 Vaccine Tracker’, <https://bridgebeijing.com/our-publications/our-publications-1/china-covid-19-vaccines-tracker/#anchor-5> (accessed 9 Jul. 2021).

⁶⁴ Safi, M. (2021), ‘Vaccine diplomacy: west falling behind in race for influence’, *Guardian*, 19 February 2021, <https://www.theguardian.com/world/2021/feb/19/coronavirus-vaccine-diplomacy-west-falling-behind-russia-china-race-influence>.

⁶⁵ Ministry of External Affairs, Government of India (2021), ‘COVID-19 Update’, 2 May 2021, <https://www.mea.gov.in/vaccine-supply.htm> (accessed 13 June 2021).

⁶⁶ The White House (2021), ‘Fact Sheet: Quad Summit’, 12 March 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/12/fact-sheet-quad-summit>.

⁶⁷ Mardell, J. (2021), ‘China’s coronavirus vaccines: for many countries, it’s not political, it’s the only choice’, *South China Morning Post*, 20 February 2021, <https://www.scmp.com/comment/opinion/article/3122175/chinas-coronavirus-vaccines-many-countries-its-not-political-its>.

So-called ‘vaccine nationalism’ is an example of what economists call the prisoner’s dilemma. When vaccine supplies are limited, countries acting in their perceived self-interest by vaccinating their whole population may be better off in terms of averted deaths (at least in the short term) than in a situation where the same amount of vaccines are distributed across all countries in relation to their population. But far more global deaths would be averted by the latter strategy – one modelling study estimated nearly twice as many.⁶⁸ However, as the recent experience of the EU with vaccine procurement has shown, in conditions of vaccine shortage some larger countries (e.g. Germany) that could have acted individually but chose the collective route may feel this has not been to their advantage, while other, smaller member states feel they have benefited from collective procurement. Yet others, such as Hungary and the Czech Republic have, as noted below, looked to Russia and China for supplies as the EU vaccination roll-out initially faltered.⁶⁹

Moreover, because of the interconnectedness of the global economy, not only does equitable allocation of vaccines save lives; it also reduces the economic fallout from the pandemic. The International Monetary Fund has estimated that vaccinating 60 per cent of the world’s population by mid-2022 would cost \$50 billion, but would avoid costs to the world economy of \$9 trillion.⁷⁰

Ultimately, the much-used phrase ‘no one is safe until everyone is safe’ represents a profound truth. The recent resurgence of travel bans and travel restrictions in the face of new variants of the virus, with their associated enormous economic costs, demonstrates that we cannot be truly out of trouble until we have reduced the disease globally to something akin to seasonal flu.

⁶⁸ Chinazzi, M., Davis, J. T., Dean, N. E., Mu, K., Pastore y Piontti, A., Xiong, X., Halloran, M. E., Longini Jr., I. M. and Vespignani, A. (2020), ‘Estimating the effect of cooperative versus uncooperative strategies of COVID-19 vaccine allocation: a modeling study’, https://www.mobs-lab.org/uploads/6/7/8/7/6787877/global_vax.pdf.

⁶⁹ Stevis-Gridneff, M. and Eddy, M. (2021), ‘Solidarity Is Not an Easy Sell as E.U. Lags in Vaccine Race’, *New York Times*, 8 February 2021, <https://www.nytimes.com/2021/02/08/world/europe/eu-vaccines-germany.html>.

⁷⁰ International Monetary Fund (2021), ‘A Proposal to End the COVID-19 Pandemic’, 19 May 2021, <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2021/05/19/A-Proposal-to-End-the-COVID-19-Pandemic-460263>.

04

Regional solidarity

Regional responses to the pandemic have differed substantially, with some regions exemplifying solidarity and others struggling to find common ground.

Key findings

- Regions that demonstrated solidarity successfully coordinated among themselves, cooperated to share and allocate resources and leveraged regional governance arrangements. This was most evident in Africa and the Caribbean region.
- The response efforts in the Latin America region were characterized by political and technical dissonance, and regional solidarity has been particularly weak.
- Europe has taken a particularly turbulent journey through solidarity, struggling to act as a regional bloc, with individual countries focusing their response efforts inwards by closing borders and forming alliances for procurement.
- In Asia-Pacific, regional institutions did not play a major role in fostering regional, or subregional, solidarity, yet countries did not appear to be dependent on supranational governance structures to galvanize cooperative and coordinated action.

Over the past decade, there has been increasing recognition of the importance of regional perspectives in contextualizing global norms and enhancing cross-border collaboration.⁷¹ Yet regional bodies with health and non-health mandates have been relatively untapped as agents of political and technical solidarity in this pandemic, and levels of cooperation and coordination have differed significantly between regions. There is great heterogeneity within regions that might account

⁷¹ Katz, R. and Standley, C. J. (2019), 'Regional approaches for enhancing global health security', *BMC Public Health*, 19:473, <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-019-6789-y>.

for some of this diversity in approaches, but while some regions have been able to unite as a bloc against the pandemic, others have struggled to find common ground or have not been so inclined.

The regions highlighted below exemplify the spectrum of regional, or subregional, solidarity. While the insights offered here are based primarily on interviews with key stakeholders based in the region, this introduces a limitation in that certain regions (notably the Eastern Mediterranean) were not as well covered.

Latin America and the Caribbean

Response efforts in the Latin America region were characterized by political and technical dissonance, and interviewees agreed that the factors separating and dividing countries in the region played a greater role in shaping the response than those they had in common. One said, ‘We are more divided than together.’ (RI-018) The level of institutional and organizational fragmentation in the region challenged its ability to function as a unit and mount a well-coordinated, unified response. Lines of communication and distribution between regional and subregional bodies were confused, and some countries took advantage of this – for example by requesting the same resources from different organizations. The political proximity of the Pan-American Health Organization (PAHO) to North America was singled out by interviewees as a barrier to effective and harmonious regional coordination and cooperation, and hence to solidarity. Interviewees reflected on the level of political interference and lack of actionable commitment from state and non-state actors, calling for constructive dialogue and stronger efforts to broker relationships between organizations and states. The region imports the majority of its healthcare products, and is thus heavily reliant on China, which has not imposed export restrictions (which some interviewees interpreted as a strong sign of interregional solidarity).

States in the Caribbean are used to relying on one another, sharing resources and supporting the weakest among them.

Uniquely within the Latin America region, the Caribbean emerged as an exemplar of solidarity. One interviewee suggested that smaller blocs, such as the Caribbean, tend to be better coordinated and more resilient because of their political inclinations, economic similarities and cultural proximities, which all play a role in fostering a community-oriented culture and approach to cooperation. States are used to relying on one another, sharing resources and supporting the weakest among them. Key institutions in the subregion framed solidarity in more concrete and actionable terms than institutions with a wider regional remit. For example, as one interviewee stated, it requires ‘listening to all the partners and seeing really what you can do, and not to be stepping over each other and duplicating, trying to fill the same gaps’ (RL-015), with a recognition that resources are limited and

therefore need to be allocated efficiently. Importantly, as one interviewee pointed out, this practice of solidarity existed prior to the pandemic. For instance, when Caribbean countries have requested extensions from WHO for implementation of International Health Regulations (IHR), countries did not ask individually but as a bloc, demonstrating a culture of solidarity with less well-prepared countries in the subregion.

Making sure that there is access and understanding that some of the Caribbean states – some members of the family – just won't be able to do as much for themselves as others, and so you have to be there to assist them. (RL-015)

So, in the case of Central America and the Caribbean, it helps that they have very similar cultures. Well, in the Caribbean, it's a little bit more diversified ... But they seem to feel that sense that they're all together, you know, whenever a hurricane hits, they all get it. (RL-046)

Africa

Leaders and public health policymakers at a regional level in Africa – namely the Africa Centres for Disease Control and Prevention (ACDC), a technical agency of the African Union (AU), the WHO Regional Office for Africa (AFRO), the African Development Bank (AfDB), and the West African Health Organization (WAHO) – called for solidarity very early on in the pandemic response. The first case was reported on the continent on 14 February 2020, and an emergency meeting of all health ministers was convened on 22 February to establish a Joint Continental Strategy and a task force to coordinate activities across the continent. The AU and ACDC have played a major role in mobilizing resources and organizing supplies of needed inputs for the whole of Africa. To date, among other key initiatives launched in response to the pandemic, they have collectively established the AU COVID-19 Response Fund; the Africa Medical Supplies Platform (AMSP) to pool and execute orders for needed medical supplies; the Partnership to Accelerate COVID-19 Testing (PACT) in Africa; the African Vaccine Acquisition Task Team (AVATT); and the Africa Pathogen Genomics Initiative. These efforts have been instrumental in securing vaccines for Africa over and above what is likely to be available through COVAX, including 270 million doses on behalf of the AU's 55 member states.⁷²

The success story of the AU/ACDC was recognized across the pool of interviewees, particularly by those in Latin America and Southeast Asia who thought solidarity could be enhanced in their own regions if similar governance structures and political will existed. Determined and decisive leadership, aligned with public health goals, paved the way for countries within the region to unite and engage in processes of mutual support and reinforcement. Both the Africa and Caribbean regions, led by their respective regional and subregional health bodies, understood where there were capacity gaps and acted quickly to identify and

⁷² Africa CDC (2021), 'AMSP opens COVID-19 vaccines pre-orders for 55 African Union Member States', press release, 19 January 2021, <https://africacdc.org/news-item/amsp-opens-covid-19-vaccines-pre-orders-for-55-african-union-member-states>.

allocate resources appropriately. Additionally, the ACDC engaged in interregional collaboration and cooperation, with the Caribbean countries gaining access to the AMSP, including 1.5 million vaccine doses.

Asia-Pacific

In the Asia-Pacific region, while several regional and subregional bodies exist, most notably the Association of Southeast Asian Nations (ASEAN) and WHO regional offices, interviewees did not see them as playing a significant role in fostering regional or subregional solidarity. Countries did not appear to be dependent on supranational governance structures to galvanize cooperative and coordinated action, nor did the relative absence of regional solidarity mechanisms appear to hinder or handicap response efforts (at either a regional or a national level).

What solidarity existed was the result of the shared experience of the previous outbreaks of SARS and Middle East respiratory syndrome (MERS). This was similarly the case across Africa and in the Caribbean region, where interviewees attributed the high levels of solidarity to prior experience in coordinating response efforts to such major outbreaks and the increased investment in public health preparedness capacities. Indeed, since SARS, all Asia-Pacific countries are convened annually by the two WHO regional offices to report on the Asia Pacific Strategy for Emerging Diseases (APSED). One interviewee suggested that the pandemic has restored a sense of purpose to these initiatives, to ‘put every action beneath this promotion of the solidarity’ (RL-002). In this regard, the pandemic may catalyse greater awareness of regional solidarity, and conscious efforts towards fostering and strengthening those pre-existing relationships and mechanisms for regional cooperation and collaboration. Indeed, in November 2020 ASEAN announced the launch of a Centre for Public Health Emergencies and Emerging Diseases.⁷³

Solidarity was facilitated to some extent by the mechanisms established by ASEAN. As one interviewee explained, when China shared COVID-19 reports with WHO, they were likewise shared through the ASEAN Secretariat and Health Sector for dissemination to all ASEAN Health focal points. The interviewee attributed this cooperation to efforts to build a trusting and transparent relationship between ASEAN and China over the past decade.

⁷³ ASEAN (2020), ‘ASEAN Strategic Framework for Public Health Emergencies’, 10 November 2020, https://asean.org/storage/2020/11/4-ASEAN-Strategic-Framework-on-PHE_Final.pdf.

05

Case study 2:

Europe's turbulent journey through solidarity

The EU has struggled to maintain solidarity during the pandemic, which has tested its ability to agree on common policies on matters ranging from PPE to vaccines.

For most of January and February 2020, EU countries resisted the idea that the novel coronavirus identified in Wuhan would seriously affect them, as the previous outbreaks of SARS and MERS had not. On 23 February EU member states even supplied 25 tons of PPE to China.⁷⁴ That was the very same day that Italy quarantined 10 small towns in Lombardy, only three days after the first person tested positive in Italy. From then on events moved very rapidly. On 4 March Germany, realizing its severe shortage, banned the export of all PPE. It was reported that the German authorities were even impounding PPE items passing through Germany to third countries. In that environment, there was a sense that European solidarity was disintegrating, particularly in Italy, which felt abandoned in its hour of need; according to a German MP, 'the Italians [are] saying the Germans are taking our masks away'. In the face of vociferous

⁷⁴ Stockton, B., Schoen, C. and Margottini, L. (2020), 'Crisis at the Commission: Inside Europe's Response to the Coronavirus Outbreak', Bureau of Investigative Journalism, 15 July 2020, <https://www.thebureauinvestigates.com/stories/2020-07-15/crisis-at-the-commission-inside-europes-response-to-the-coronavirus-outbreak>.

complaints from neighbouring countries including Switzerland and Italy, Germany soon ended the ban when the EU Commission introduced export controls for the EU as a whole.⁷⁵

Meanwhile, as the epidemic rapidly escalated, almost all EU countries introduced partial or complete border closures, something most EU countries repeated in the second wave in early 2021.⁷⁶

A massive test of EU solidarity was the subsequent attempt to launch a COVID-19 recovery fund designed to help EU members most affected by the pandemic (mainly in southern and eastern Europe). Historically, as in the aftermath of the 2008 financial crisis, Germany had been resistant to EU emergency schemes that involved fiscal transfers to weaker member states. Under the urging of President Macron and the President of the European Commission, Ursula von der Leyen, EU members including Germany eventually agreed in July 2020 to a scheme whereby the European Commission could borrow money for a €750 billion fund, just over half of which would be grants. But the negotiations on the details of this scheme were fraught. In one of the longest EU summit meetings ever held, Austria, Denmark, the Netherlands and Sweden resisted the idea of using borrowing to fund grants to member states. Agreement was reached only after the opposing countries were offered extra budget rebates. A further condition of this agreement was that member states must submit to the Commission their plans for allocating the money. The deadline for submission was April 2021, with a view to disbursement beginning in the second half of 2021.⁷⁷

At the same time, the EU was active on the international stage, with Macron and von der Leyen co-hosting the launch of the ACT-A initiative on 24 April 2020.

The EU experience with vaccine procurement has been a major test of European solidarity. The EU was a slow starter compared with the efforts made by other countries, notably the US and the UK, to invest in the development of vaccine candidates, as well as to make advance purchase agreements. France and Germany stepped into this gap and, together with the Netherlands and Italy (the so-called Inclusive Vaccine Alliance), began negotiating with producers of vaccine candidates. Before the Commission finally launched its vaccine strategy for joint EU procurement on 17 June 2020,⁷⁸ the Alliance had already reached an agreement with AstraZeneca for the supply of up to 400 million doses.⁷⁹ It was agreed that the Commission would take over the AstraZeneca deal and ongoing negotiations with Johnson & Johnson.

⁷⁵ Hall, B., Chazan, G., Dombey, D., Fleming, S., Ghiglione, D., Johnson, M., Jones, S. and Mallet, V. (2020), 'How coronavirus exposed Europe's weaknesses', *Financial Times*, 20 October 2020, <https://www.ft.com/content/efdadd97-aef5-47f1-91de-fe02c41a470a>.

⁷⁶ For documentation on the current position, see European Commission (no date), 'Migration and Home Affairs: Temporary Reintroduction of Border Control', https://ec.europa.eu/home-affairs/what-we-do/policies/borders-and-visas/schengen/reintroduction-border-control_en.

⁷⁷ Khan, M., Ghiglione, D. and Mount, I. (2021), 'EU recovery plan faces bottleneck, economists warn', *Financial Times*, 5 January 2021, <https://www.ft.com/content/9fb2f320-6a37-421d-b738-196d3e736bae>.

⁷⁸ European Commission (2020), 'Commission's centralised EU approach', 18 June 2020, https://ec.europa.eu/info/publications/commissions-centralised-eu-approach_en.

⁷⁹ AstraZeneca (2020), 'AstraZeneca to supply Europe with up to 400 million doses of Oxford University's vaccine at no profit', 13 June 2020, <https://www.astrazeneca.com/media-centre/press-releases/2020/astrazeneca-to-supply-europe-with-up-to-400-million-doses-of-oxford-universitys-vaccine-at-no-profit.html>.

Under the Commission scheme, deals were negotiated with vaccine companies; vaccines, when available, would be distributed to member states in quantities proportional to their population. Member states agreed not to negotiate separate deals with those contracted to the Commission. Nevertheless, in August and September 2020 Germany negotiated deals with two of its producers, BioNTech and CureVac, for a total of 50 million doses, although this happened before the Commission had finalized contracts with these companies.⁸⁰

As the first vaccines began to be approved around the world, the problems of a joint approach emerged. The EU had negotiated deals later than the front runners such as the US and the UK, which had also invested in vaccine development, and it was alleged it had focused too much on driving down prices in negotiation rather than providing incentives for secure delivery schedules. The European Medicines Agency (EMA) was also slower than some other national regulators to authorize marketing of the vaccines.

In January 2021 it became apparent that the EU would not be receiving the supplies it was expecting in the first quarter of 2021, in particular because AstraZeneca was unable to meet its promised delivery schedule. The EU was expecting over 250 million doses in the first half of the year, but only 100 million were likely to be delivered. As a result, the EU has initiated legal action against AstraZeneca.⁸¹ It resorted to the already noted regulation that required EU member states to submit to the Commission proposed export authorizations.⁸² So far, this has only been used to block one shipment of the AstraZeneca vaccine to Australia.⁸³

As the first vaccines began to be approved around the world, the problems of a joint approach emerged.

While vaccine deliveries were to be allocated in proportion to population, EU member states had insisted on flexibility in choosing the vaccines they actually used. Countries that intended to rely more heavily on the AstraZeneca vaccine, which was cheaper and easier to handle, therefore found themselves losing out disproportionately as a result of the AstraZeneca shortfall.⁸⁴ This led to acrimonious discussions at the EU summit on 25 March 2021.⁸⁵ The shortage

⁸⁰ Rinke, A. and Siebold, S. (2021), 'Germany secured 50 million vaccine doses from CureVac, BioNTech on top of EU supplies', Reuters, 8 January 2021, <https://www.reuters.com/article/us-health-coronavirus-vaccine-germany-idUSKBN29D1WU>.

⁸¹ BBC News (2021), 'Coronavirus: EU sues AstraZeneca over vaccine delivery delays', 26 April 2021, <https://www.bbc.co.uk/news/world-europe-56891326>.

⁸² European Commission (2021), 'Commission Implementing Regulation (EU) 2021/111 of 29 January 2021 making the exportation of certain products subject to the production of an export authorisation', https://eur-lex.europa.eu/eli/reg_impl/2021/111/oj.

⁸³ Fleming, S., Brunsden, J. and Johnson, M. (2021), 'Italy blocks shipment of Oxford/AstraZeneca vaccines to Australia', *Financial Times*, 4 March 2021, <https://www.ft.com/content/bed655ac-9285-486a-b5ad-b015284798c8>.

⁸⁴ Amaro, S. (2021), 'European Union countries clash over unequal vaccine distribution', CNBC, 15 March 2021, <https://www.cnbc.com/2021/03/15/austria-other-eu-countries-complain-over-unequal-vaccine-distribution.html>.

⁸⁵ Peel, M., Khan, M. and Fleming S. (2021), 'EU leaders clash over vaccine distribution in tense summit', *Financial Times*, 25 March 2021, <https://www.ft.com/content/486a65fe-0608-4230-b9d5-c990f10d5be8>.

has encouraged some EU countries, such as Hungary and the Czech Republic, to purchase vaccines from China and Russia, although these are not yet approved in the EU.

The tribulations of the EU vaccine roll-out have been further amplified by politicians badmouthing the AstraZeneca vaccine – President Macron notoriously said it was ‘quasi-ineffective’ for those aged over 65.⁸⁶ Many national EU regulators initially confined its use to those under that age, although the EMA (and WHO) had approved its use for all adults.⁸⁷ Further controversy was stoked in March 2021, as many EU countries, again acting against the recommendation of the EMA (and WHO), suspended AstraZeneca vaccinations while a number of cases of thrombosis were investigated. These suspensions took place after discussions at the highest political level between Italy, Germany, France and Spain.⁸⁸

While some of the blame for this bad publicity can be laid at the door of AstraZeneca (and the regulators) for the piecemeal nature of its first Phase 3 trials and its confusing, or even misleading, reporting of the results, as well as the shortfalls in its supplies to the EU, the apparent politicization of the issue has contributed to public distrust.

⁸⁶ France24 (2021), ‘Macron: AstraZeneca vaccine ‘quasi-ineffective’ for over-65s’, 29 January 2021, <https://www.france24.com/en/live-news/20210129-macron-astrazeneca-vaccine-quasi-ineffective-for-over-65s>.

⁸⁷ The Editorial Board (2021), ‘The EU’s vaccination rollout badly needs a revamp’, *Financial Times*, 3 March 2021, <https://www.ft.com/content/9d5d94c2-3887-4f80-8b12-db047a60a99b>.

⁸⁸ Mancini, D. P., Johnson, M., Peel, M., Keohane, D., Milne, R. and Neville, S. (2021) ‘European capitals co-ordinated suspension of Oxford/AstraZeneca Covid jab’, *Financial Times*, 16 March 2021, <https://www.ft.com/content/a046e340-892b-4e68-bfae-4f5c40a5506a>.

06 Solidarity within countries

At national level, the state of solidarity reflects the quality and integrity of the relationships between policymakers, the scientific and public health communities, and the population.

Key findings

- The pandemic has highlighted the profound consequences of inequalities in health determinants and the imperative to redress inequities within countries, with socially and economically vulnerable groups bearing the brunt of the crisis.
- Many countries have thus far failed to protect and support the disadvantaged and most vulnerable in their societies, including through adequate support for isolation, quarantine and lockdown.
- The quality of the relationships and interactions between key groups of leaders, such as politicians, public health leaders and scientists, has been critical in shaping the degree to which a population acts in solidarity with the nation's response efforts.
- Solidarity among the population has been easier to achieve in societies where the culture or social contract expects the sacrifice of individual needs or desires for the benefit of society at large.
- Effective communication is vital for building trust and rapport with the population to foster solidarity with the response, and the proliferation and spread of misinformation and disinformation has undermined national solidarity.

The ability to achieve national unity can be viewed as a three-way tug of war seeking to balance public health interventions with their economic consequences while keeping the population on board with interventions that can involve social and economic hardship and the restriction of liberties. Solidarity at a national level therefore hinges to a large degree on the relationships between policymakers, the scientific and public health communities, and the population.

Solidarity and politics

The politicization of global crises, including pandemics, is not a new phenomenon. The HIV epidemic, the SARS epidemic, the 2014–16 West Africa Ebola outbreaks and the 2015–16 Zika virus outbreaks were all used to advance political interests.⁸⁹ In the case of COVID-19, some politicians have derived political mileage from attacking and blaming other countries or institutions (such as, China or WHO) for the scale of the crisis; denying the severity of the threat; alienating the scientific and public health communities; or propagating alternative facts and rejecting public health guidance on mask-wearing or physical distancing, handwashing and vaccine uptake. The repercussions of pandemic politicization can be extensive: it not only hampers efforts to foster national unity, but can also encourage ethnic and racial discrimination among individuals, societies and countries.

Research conducted by the Lowy Institute found that, to date, no single political system has emerged as significantly or consistently more effective in managing the pandemic.⁹⁰ Using several health outcome indicators, the institute developed a COVID Performance Index, which found that authoritarian regimes (classified according to the Economist Intelligence Unit's Democracy Index 2019) performed only marginally better (scoring 49.6) than democracies (scoring 46.8). This is in keeping with our findings that solidarity can prevail in countries with different political systems and different governance arrangements.

Some interviewees observed that two-party systems and partisan politics can, however, be a barrier to solidarity. Decisions related to the pandemic response can manifest more as political calculation than evidence-based, and are easily politicized along party lines. While one-party systems or those leaning towards authoritarianism might make it easier to achieve solidarity, as one interviewee pointed out, it still very much depends on whether the elected leader seeks to unify in times of crisis or to achieve opportunistic political gain. For example, in Tanzania (now deceased) President John Magufuli's 'aggressive COVID denialism' resulted

⁸⁹ Abbas, A. H. (2020), 'Politicizing the Pandemic: A Schemata Analysis of COVID-19 News in Two Selected Newspapers', *International Journal for the Semiotics of Law*, 3 July: 1–20, <https://pubmed.ncbi.nlm.nih.gov/33214736>.

⁹⁰ Lowy Institute (2021), 'Covid Performance Index', <https://interactives.lowyinstitute.org/features/covid-performance>, based on data available to 13 March 2021 (accessed 12 May 2021).

in a lack of reliable reporting, public health inaction and refusal of vaccines, which reflected the ruling party's antagonism towards *mabeberu* (imperialists), its tight control over information and aversion to scientific evidence.^{91,92}

Interviewees recognized that achieving national unity is increasingly a function of political leadership and the ability of policymakers to engage in a process of meaningful negotiation and compromise, such as by bringing in multiple different parties and actors to agree on a policy. In Bhutan, for example, with its population of about 780,000 and just one recorded death from COVID-19 up to the end of May 2021, an important factor in its success has been the high level of political commitment, in which King Jigme Khesar Namgyel Wangchuck has played a leading role. Community mobilization also played a major part in this emerging success story, particularly the DeSuung volunteers (Guardians of the Peace), a movement initiated by the King. Above all, there has been a high level of mutual trust between leaders and the population.^{93,94}

Similarly, in Finland, the government formed a committee between the ruling and opposition parties to fight the pandemic together. Another example is Tunisia, where the government created a National COVID-19 Monitoring Authority that includes senior officials from all ministries, to facilitate better compliance across sectors, as well as coordination with subnational committees.⁹⁵

The countries that have done well are the ones who've managed to maintain that sense of national unity and national purpose, and where opposition parties have continued to support each other. (ML-005)

The relationship between policymakers and public health leaders

In times of crisis, the actions of policymakers and the advice of public health experts are critical to gaining public trust and acceptance of new policies or interventions. The relationship between these two groups has a significant impact on how much solidarity the population demonstrates with the national response. Governments have taken different approaches, informed to a greater or lesser extent by science, but ultimately accountability for pandemic response policy rests with political leaders.

Several interviewees attributed strong working relationships between policymakers and scientific/public health communities to recent experience of cooperating to control disease outbreaks. For example, in Mexico, following the

⁹¹ Makoni, M. (2021), 'Tanzania refuses COVID-19 vaccines', *The Lancet*, 397 (10274): 566, [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00362-7/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00362-7/fulltext).

⁹² Devermont, J. and Harris, M. (2020), 'Implications of Tanzania's bungled response to COVID-19', Center for Strategic and International Studies, 26 May 2020, <https://www.csis.org/analysis/implications-tanzanias-bungled-response-covid-19>.

⁹³ Drexler, M. (2021), 'The Unlikeliest Pandemic Success Story', *The Atlantic*, 10 February 2021, <https://www.theatlantic.com/international/archive/2021/02/coronavirus-pandemic-bhutan/617976>.

⁹⁴ Dema, C. and Ives, M. (2021), 'How the Tiny Kingdom of Bhutan Out-Vaccinated Most of the World', *New York Times*, 18 April 2021, <https://www.nytimes.com/2021/04/18/world/asia/bhutan-vaccines-covid.html>.

⁹⁵ Al Saidi, A. M. O., Nur, F. A., Al-Mandhari, A. S., El Rabbat, M., Hafeez, A. and Abubakar, A. (2020), 'Decisive leadership is a necessity in the COVID-19 response', *The Lancet* 396: 295–97, [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(20\)31493-8.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)31493-8.pdf).

2009 H1N1 pandemic, the national disease surveillance system was expanded and decentralized. Over time, this encouraged more routine coordination and communication between branches of government and the scientific community.⁹⁶ This was evident during the current pandemic, as one interviewee remarked on the swift, government-initiated calls to different diagnostic centres to evaluate capacities and supplies. At the highest levels of government, however, solidarity between the political leadership and the nation's public health community failed; President Andrés Manuel López Obrador was in conflict with the advice of his public health authorities and with the country's medical community, amid unrest in the population.⁹⁷

In Nigeria, the experience with Ebola in 2014 galvanized greater cooperation and collaboration between policymakers, clinicians and public health leaders at both national and subnational levels. The Bill to Act, which was signed by President Muhammadu Buhari in 2018, established the Nigeria CDC (NCDC) as a parastatal agency legally mandated to respond to public health threats, signalling the high level of trust between the federal government and the NCDC. As a result, interviewees observed minimal political interference and strong agreement between the public health authorities and government on the best way forward. Again, this relationship is not without its challenges, as one interviewee remarked on the impact of Nigeria's police brutality crisis on the levels of public trust in the NCDC, which was viewed by many as 'corrupt' and 'all part of the same government' (NP-023).

Interviewees observed minimal political interference and strong agreement between the public health authorities and government on the best way forward.

The examples of Mexico and Nigeria illustrate the complexity and fragility of sustaining relationships between policymakers and public health leaders during a crisis. In many countries, this relationship has been fraught with tension from the outset. For example, the UK government repeatedly insisted early in the pandemic that its decision-making was 'following the science', but questions were raised about the degree to which this was the case, and about the politicization of scientific advice. The membership of the UK's Scientific Advisory Group for Emergencies (SAGE) was initially heavily criticized for inappropriate involvement of government advisers, lack of transparency and under-representation of public health and other relevant communities, with one high-profile commentator claiming the relationship between scientists and government had become

⁹⁶ Hernandez-Avila, M. and Alpuche-Aranda, C. M. (2020), 'Mexico: Lessons learned from the 2009 pandemic that help us fight COVID-19', *Healthcare Management Forum*, 33(4): 158–63, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7218351/pdf/10.1177_0840470420921542.pdf.

⁹⁷ Ibarra-Nava, I., Cardenas-de la Garza, J. A., Ruiz-Lozano, R. E. and Salazar-Montalvo, R. G. (2020), 'Mexico and the COVID-19 response', *Disaster Medicine and Public Health Preparedness*, 27 July: 1–2, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7445449>.

‘dangerously collusive’.⁹⁸ In May 2020, a separate self-appointed group of 12 leading scientists established the ‘Independent SAGE’, which held weekly public online briefings and offered scientific advice.

In the US, the Trump administration consistently rejected the role and value of science in decision-making, and questioned the trustworthiness of leading public health experts and agencies. Unlike the legal protection afforded to the NCDC, the Trump administration was able to sideline and undermine agencies such as the US Centers for Disease Control (CDC), including through making political appointments to them. For example, in May 2020 the Trump administration blocked the Director of the National Institute of Allergy and Infectious Diseases, Dr Anthony Fauci, from testifying on the pandemic response in front of the House of Representatives.⁹⁹

The alienation of the scientific and public health communities exposes the lack of collegiality, mutual respect and support between policymakers and these communities, at the expense of national unity. Indeed, in a 2020 survey on national responses to the pandemic, 54 per cent of UK respondents and 52 per cent of US respondents thought their government was handling the pandemic poorly, compared with only 25 per cent of respondents in Italy, 14 per cent in South Korea, and 6 per cent in Australia.¹⁰⁰ In fact, across the 14 countries surveyed, the majority of respondents believe that their own country has done a good job handling the pandemic, with the exception of the UK and the US.

Population buy-in with the national response

The relationship between government and the population is a crucial determinant of national unity, linked to a number of interrelated factors including equity; social cohesion and community mobilization across different population subgroups; and the trustworthiness, clarity and consistency of risk communication and public health messaging.

Equity

Even in countries where policy responses to the pandemic have prioritized both lives and livelihoods, the pandemic has exposed and exacerbated the underlying inequities in society, with devastating impacts on marginalized and vulnerable communities worldwide. Neglecting those groups has prolonged – and will continue to prolong – the pandemic.

⁹⁸ Horton, R. (2020), ‘How can any scientists stand by this government now?’, *Guardian*, 27 May 2020, <https://www.theguardian.com/commentisfree/2020/may/27/scientists-ministers-dominic-cummings-advisers-government-coronavirus?fbclid=IwAR3Mwoi4maRJBru1-2EOS7KAFOecSaNBOKFhZ5VHzzyUZVBZPAh3fcOOMr6w#maincontent>.

⁹⁹ Viglione, G. (2020), ‘Four ways Trump has meddled in pandemic science – and why it matters’, *Nature*, 3 November 2020, <https://www.nature.com/articles/d41586-020-03035-4>.

¹⁰⁰ Pew Research Center (2020), ‘Most Approve of National Response to COVID-19 in 14 Advanced Economies’, 27 August 2020, <https://www.pewresearch.org/global/2020/08/27/most-approve-of-national-response-to-covid-19-in-14-advanced-economies>.

While initially praised for its decisive public health action and roadmap to economic resilience, Singapore failed to include and prioritize low-wage migrant workers living in overcrowded and unhygienic dormitories. As of December 2020, 93 per cent of all positive cases recorded in Singapore were among migrant workers.¹⁰¹ Interviewees recognized the government's ongoing efforts to address migrant worker vulnerability, but credited civil society and community mobilization with acting fast to protect and advocate for better healthcare.

Singapore is just one example. Similar tragedies have been evident in the Gulf Cooperation Council (GCC) countries, where Asian migrant workers suffer disproportionately high rates of COVID-19 infection. In Saudi Arabia, for instance, Asian migrant workers were found by one study to account for 70–80 per cent of all new cases.¹⁰² Almost all countries provided inadequate support to important vulnerable groups. Nearly every HIC has failed to protect residents of care homes, while knowing they were at the highest risk of dying from COVID-19. A survey of 21 countries found that 46 per cent of all COVID-19 deaths were among care home residents.¹⁰³ Similar trends are apparent in infection and death rates among people of colour. In the UK, according to the Office for National Statistics, males from a black African background had a death rate 3.8 times higher than that of white males. Even taking account of geography, socio-economic characteristics and health measures, including pre-existing conditions, the rate was still 2.5 times higher than that of white males.¹⁰⁴ There are many other examples of inequitable policy responses that fail to take into account the differential impact of the pandemic across social stratifiers including age, gender, ethnicity, income level, education and professional status.

Several interviewees recognized that solidarity is not just about having a common purpose and consistent approach to the pandemic, but also about focusing on those most vulnerable to infection or to the socioeconomic fallout of the pandemic, who risk being left behind. Many argued that the solidarity movement has failed to advance health equity in a meaningful way, or to redress the exposed inequities. As one interviewee stated, the pandemic has not been a great equalizer, because 'the most disadvantaged or marginalized in our societies are the ones who are most at risk of infection and who will suffer the longer-term socioeconomic effects of both the virus and the economic fallout' (RI-033). Another interviewee reinforced that view:

Solidarity is the flipside of inequity. Throughout 2020, we have seen the gravest single instance of health-related inequity, in terms of the COVID-19 burden, between countries and within countries, in particular, along the usual socioeconomic, racial lines. (RI-057)

¹⁰¹ Illmer, A. (2020), 'Covid-19: Singapore migrant workers infections were three times higher', BBC News, 16 December 2020, <https://www.bbc.co.uk/news/world-asia-55314862>.

¹⁰² Yaya, S., Yeboah, H., Charles C. H., Otu, A. and Labonte, R. (2020), 'Ethnic and racial disparities in COVID-19-related deaths: counting the trees, hiding the forest', *BMJ Global Health*, 2020;5:e002913, doi:10.1136/bmjgh-2020-002913.

¹⁰³ Comas-Herrera, A., Zalakaín, J., Lemmon, E., Henderson, D., Litwin, C., Hsu, A. T., Schmidt, A. E., Arling, G. and Fernández, J. (2020), 'Mortality associated with COVID-19 in care homes: international evidence', International Long Term Care Policy Network, 14 October 2020, <https://ltccovid.org/wp-content/uploads/2020/10/Mortality-associated-with-COVID-among-people-living-in-care-homes-14-October-2020-3.pdf>.

¹⁰⁴ Office for National Statistics (2020), 'Updating ethnic contrasts in deaths involving the coronavirus (COVID-19), England and Wales: deaths occurring 2 March to 28 July 2020', 16 October 2020, <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/updatingethniccontrastsindeathsinvolvingthecoronaviruscovid19englandandwales/deathsoccurring2marchto28july2020>.

Policy responses and interventions introduced to address the pandemic must be accompanied by the appropriate provisions and protection mechanisms to facilitate public cooperation. As WHO implored on several occasions, this needs to include support for isolation, quarantine and lockdowns, to create an enabling environment for all people to participate in and benefit from the response, as part of the social contract between government and the public. Where social protection is not afforded to the population, research suggests that the impact of national lockdowns on both income loss and risk of exposure to COVID-19 is regressive.¹⁰⁵ However, the past three decades of growing inequality and income insecurity have eroded trust in public systems and institutions, and progressively weakened social cohesion.¹⁰⁶ Indeed, many countries entered the pandemic with a tenuous social contract. Although to date nearly all countries and territories have responded with a combined total of 1,622 social protection measures,¹⁰⁷ interviewees did not perceive there to be sufficient, comprehensive or sustained action at a policy level to prioritize marginalized and vulnerable populations; redress the disproportionate suffering; and remove or mitigate structural barriers to adopting healthy behaviours and accessing healthcare.

Social cohesion, community mobilization and trust

How the individual relates to the community, and the strength of that relationship, was perceived by several interviewees as a key difference between solidarity at a community level in the Asia-Pacific region compared with that in Europe and North America. According to interviewees, individuals in the latter regions tend to be less socially and economically dependent on the community, which, in turn, weakens social cohesion and mechanisms for collective action that are critical to achieving solidarity with the public health response efforts.

By contrast, in many communities across the Asia-Pacific region (and other parts of the world), as well as in Indigenous communities, as highlighted by one interviewee, individuals rely heavily on the community for various aspects of daily life and subsistence. There is a more developed sense of social, cultural and community responsibility and duty that transcends individual rights and freedoms. This leads to an almost habitual practice of trust, mutual support and recognizing interdependencies – all factors that have characterized solidarity in response efforts. Recent studies have similarly observed the protective effect of collectivist societies compared to individualistic ones, in terms of their COVID-19-related health outcomes.^{108,109}

¹⁰⁵ Sweeney, S., Capeding, T. P. J., Eggo, R. et al. (2021), 'Exploring equity in health and poverty impacts of control measures for SARS-CoV-2 in six countries', *BMJ Global Health*, 2021;6:e005521, <https://gh.bmj.com/content/6/5/e005521>.

¹⁰⁶ Razavi, S., Behrendt, C., Bierbaum, M., Orton, I. and Tessier, L. (2020), 'Reinvigorating the social contract and strengthening social cohesion: Social protection responses to COVID-19', *International Social Security Review*, 73(3): 55–80, <https://onlinelibrary.wiley.com/doi/full/10.1111/issr.12245>.

¹⁰⁷ International Labour Organization (2020), 'Social Protection Responses to the COVID-19 Crisis Around the World', 8 April 2020, https://www.ilo.org/seccoc/information-resources/publications-and-tools/Brochures/WCMS_741212/lang-en/index.htm.

¹⁰⁸ Rajkumar, R. P. (2021), 'The relationship between measures of individualism and collectivism and the impact of COVID-19 across nations', *Public Health in Practice*, 2(100143), <https://doi.org/10.1016/j.puhip.2021.100143>.

¹⁰⁹ Yong, E. (2021), 'The Fundamental Question of the Pandemic is Shifting', *The Atlantic*, 9 June 2021, <https://www.theatlantic.com/health/archive/2021/06/individualism-still-spoiling-pandemic-response/619133>.

[O]ne of the things that we are taught very early on as Indigenous peoples is that community matters. And so we are experts in building solidarity movements because we are experts in relationship and what it means to have a bi-directional relationship that does not just benefit one party within that, but is mutually beneficial to everybody who is participating. (MI-041)

In addition, how society responds to regulations and public health guidance often also reflects the level of public trust in government and its institutions, especially when used to justify restrictions of individual liberties.¹¹⁰ Overall, interviewees perceived trust in political leadership to be important in achieving social cohesion and unity between government and the public. Concerning Thailand, one interviewee observed that, although the public may disagree with political decisions and policies, there is a greater trust in government specifically when it comes to protecting the safety, health and wellbeing of people – perhaps as a result of the collective memory of the threat posed by the 2003 SARS outbreak and the need for public cooperation in countering it. However, trust in political leadership is not necessarily a deciding factor in national unity. In Hong Kong, for instance, historically low public trust in government triggered community solidarity and a strong civil society response. The 2019–20 protest movements in Hong Kong pivoted organizational capacity and civic infrastructure to conduct COVID-19 surveillance, distribute masks and install hand-sanitizer dispensers, focusing on impoverished and vulnerable communities, including the elderly.^{111,112} Similarly in Brazil, where political leadership undermined solidarity, grassroots bodies organized to mobilize resources, communicate hygiene guidelines and dispel mis- and disinformation.¹¹³

Risk communication and public health messaging

Credible and effective risk communication and public health messaging are crucial for building public trust and solidarity with the response. Indeed many countries communicated their pandemic response responsibilities in terms of solidarity.¹¹⁴ For example, New Zealand's Prime Minister Jacinda Ardern reinforced health messaging through various media channels and explained how values such as solidarity, teamwork, kindness and collective action justified public health interventions. Interviewees argued that it helps to create a common and collective understanding of the problem, and of what is required from society to cooperate and contribute. As one interviewee put it:

¹¹⁰ Pak, A., McBryde, E. and Adegboye, O. A. (2021), 'Does High Public Trust Amplify Compliance with Stringent COVID-19 Government Health Guidelines? A Multi-country Analysis Using Data from 102,627 Individuals', *Risk Management and Healthcare Policy*, 14: 293–302, <https://www.dovepress.com/does-high-public-trust-amplify-compliance-with-stringent-covid-19-gove-peer-reviewed-article-RMHP>.

¹¹¹ Tufekci, Z. (2020), 'How Hong Kong Did It', *The Atlantic*, 12 May 2020, <https://www.theatlantic.com/technology/archive/2020/05/how-hong-kong-beating-coronavirus/611524>.

¹¹² Hartley, K. and Jarvis, D. S. L. (2020), 'Policymaking in a low-trust state: legitimacy, state capacity, and responses to COVID-19 in Hong Kong', *Policy and Society*, 39:3, <https://www.tandfonline.com/doi/full/10.1080/14494035.2020.1783791>.

¹¹³ Global Solutions Initiative (2021), 'The World Policy Forum', *Global Solutions Journal*, Issue 7, May 2021, <https://www.global-solutions-initiative.org/wp-content/uploads/2021/05/Global-Solutions-Journal-7-Summit-2021-Edition.pdf>.

¹¹⁴ Tworek, H., Beacock, I. and Ojo, E. (2020), 'Democratic Health Communications during Covid-19: A RAPID Response', Vancouver: UBC Centre for the Study of Democratic Institutions, September 2020, https://democracy2017.sites.olt.ubc.ca/files/2020/09/Democratic-Health-Communication-during-Covid_FINAL.pdf.

Without a clear risk communication strategy, there is not going to be solidarity, because solidarity is based on communicating a common value, and I think that that's the challenge. (FP-038)

In many countries in the early stages of the pandemic, the lack of transparent, timely and effective risk communication by health authorities failed to catalyse collective action such as physical distancing, lockdowns and appropriate use of PPE.¹¹⁵ In the absence of effective official risk communication, rumours and misinformation are able to proliferate. The unintentional spread of false information (misinformation), or the deliberate circulation of fabricated information (disinformation), undermined solidarity by distorting public health messages, misleading individuals and communities, and splintering public trust. There was an overwhelming sense that the actors forging a solidarity movement were disastrously unprepared for the vast, rapid spread of disinformation. In Thailand, this 'infodemic' was tackled by the Prime Minister's Office calling on all major media organizations to cooperate to produce a consistent message, coordinate public health communication and reduce the risk of misinformation.

¹¹⁵ Hou, Z., Du, F., Zhou, X., Jiang, H., Martin, S., Larson, H. and Lin, L. (2020), 'Cross-Country Comparison of Public Awareness, Rumors, and Behavioral Responses to the COVID-19 Epidemic: Infodemiology Study', *Journal of Medical Internet Research*, 22(8): e21143, <https://doi.org/10.2196/21143>.

07 Lessons for solidarity

How can governments and institutions now work together to foster and sustain solidarity at all levels, to urgently address widening inequities as a result of this crisis and better prepare for the next?

In analysing how the world has demonstrated – or failed to demonstrate – solidarity in addressing the COVID-19 pandemic, the underlying theme of this paper is that solidarity is not just positive rhetoric; it is also a necessary condition for suppressing the pandemic effectively and requires strong political commitment and high levels of social cohesion.

The phrase ‘no one is safe until we are all safe’ is much used but profoundly true. This is most commonly talked of between nations: until every country has the disease under control, the pandemic is not over. But, importantly, it also applies within countries. The pandemic has disproportionately affected the disadvantaged, the poor, the vulnerable, minorities, migrants and other neglected and marginalized groups. It has ruthlessly exposed, and exacerbated, the inequalities existing in both low- and high-income countries. And it has been prolonged by the failure in many countries to adequately support and protect these groups – financially and in other ways. Where solidarity has been weak, inequities have widened, and effective responses to the pandemic have been frustrated.

There are many lessons to be learned from the experience of the pandemic to date, and many other important questions that need to be addressed. Several bodies are undertaking this, including the Independent Panel on Pandemic Preparedness and Response. This paper, however, concentrates on lessons that can be learned in relation to solidarity.

Solidarity between countries

Any new governance structures established in response to this pandemic, or reform of existing ones, must have at their core the objective of fostering global solidarity and addressing inequity.

The paper notes that the pandemic struck when global solidarity was at a very low ebb, with multiple geopolitical tensions. The pandemic has escalated those tensions, most notably those between the US and China, but has also exacerbated others, such as between the UK and the EU post-Brexit. Throughout 2020, this lack of global solidarity was reflected in the absence of significant global initiatives coming from the UN General Assembly or Security Council, the G7 or the G20. These bodies have previously come to the fore in a global crisis (as for instance in the 2008 financial crisis), but their lethargic leadership in response to this pandemic has highlighted the need for more agile and inclusive governance mechanisms that embody the values of solidarity. The G7 summit in June 2021 did something to address these deficiencies in multilateral cooperation, but still fell far short of what is needed to bring the pandemic under control globally by 2022.

In addition, governments have failed to act together in areas where solidarity and cooperation would have produced better outcomes. These failures include the unilateral imposition of travel and trade restrictions, the uncoordinated closure of borders, and in recent months threats to the production and distribution of vaccines as a result of the unilateral imposition of trade and other emergency measures in various countries. Nor have governments and stakeholders been able to agree, as yet, on proposals such as a waiver of intellectual property rights in the pandemic or on sharing intellectual property rights and know-how in WHO's C-TAP. Above all, the biggest failure of global solidarity has been inequitable access to COVID-19 vaccines.

However, the pandemic has resulted in the creation of major institutional innovations designed to build and leverage international solidarity in fighting COVID-19. These are the ACT-A initiative and its component COVAX. Our analysis suggests that these have been widely welcomed as multi-stakeholder groups with the specific objectives of developing new tools to combat COVID-19 that also explicitly address the need to ensure equitable global access to these tools. But as new institutions, created at top speed in the midst of the pandemic, they have been hampered in fully achieving their goals, not least because many countries had already embarked on national initiatives, in particular in the development and acquisition of vaccines. They have also been criticized for being insufficiently inclusive in decision-making, particularly in relation to LMIC participation.

This mixed picture in respect of the demonstration of solidarity suggests that governments and other actors need to do better *collectively* in a spirit of solidarity to minimize or avoid some of the problems identified in this pandemic.

There is a need to put in place mechanisms that will help to institutionalize solidarity ready for the next global health crisis. For example, the Independent Panel recommends transforming the current ACT-A infrastructure into a permanent platform with representative governance and an equity-driven

strategy. Such structures will require additional mechanisms to support operationalization and ensure accountability; otherwise they risk succumbing to the same political plays and power grabs that undermined ACT-A, and COVAX in particular, in the pandemic. There is a fundamental imbalance of power and knowledge in many existing governance structures, and this needs to be addressed and carefully reconstructed in the design of any new ones.¹¹⁶

The principles of solidarity should be embedded in any new pandemic governance instrument, and parties should be convened regularly to review progress, encourage accountability and reinforce solidarity norms.

Solidarity cannot just be created overnight. There should be a focus after this pandemic on institutions and rules that encourage collective action. One way in which greater solidarity can be created is through countries agreeing to a set of rules about how they would prepare for and respond to a future pandemic. The IHR (2005) are the current agreed rules, but the Independent Panel in its second progress report declared the global pandemic alert system ‘not fit for purpose’ and described the IHR as an analogue system in a digital age.¹¹⁷ A Review Committee on the functioning of the IHR in the pandemic reported in April 2021, with a number of recommendations for improving the current arrangements. It did not recommend revising the IHR, as opposed to strengthening its implementation, but noted the need for a new and complementary mechanism, such as a global convention.¹¹⁸

Solidarity cannot just be created overnight, but there should be a focus after this pandemic on institutions and rules that encourage collective action.

On 30 March 2021, 25 heads of state endorsed a statement calling for a pandemic treaty. Dr Tedros stated: ‘This treaty would strengthen the implementation of the International Health Regulations, and critically, it would also provide a framework for international cooperation and solidarity.’¹¹⁹ Yet the call for a treaty has not been endorsed by the US, China, Russia, India and many other countries whose support would be necessary for such a treaty to see the light of day. At the World Health Assembly in May 2021, member states could only agree on a further meeting in November 2021 to consider the benefits of a possible international instrument, whereas the Independent Panel had recommended actual agreement

¹¹⁶ Wenham, C., Kavanagh, M., Torres, I., Yamey, G. (2021), ‘Preparing for the next pandemic’, *BMJ*, 2021; 373: n1295, <https://www.bmj.com/content/373/bmj.n1295>.

¹¹⁷ Independent Panel (2021), ‘Second Report on Progress’, January 2021, https://theindependentpanel.org/wp-content/uploads/2021/01/Independent-Panel_Second-Report-on-Progress_Final-15-Jan-2021.pdf.

¹¹⁸ World Health Organization (2021), ‘Report of the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 response’, A74/9 Add.1, 30 April 2021, https://cdn.who.int/media/docs/default-source/documents/emergencies/a74_9add1-en.pdf?sfvrsn=d5d22fdf_1&download=true.

¹¹⁹ World Health Organization (2020), ‘WHO Director-General’s remarks at the press conference with President of the European Council to discuss the proposal for an international pandemic treaty’, 30 March 2021, <https://www.who.int/director-general/speeches/detail/who-director-general-s-remarks-at-the-press-conference-with-president-of-the-european-council-to-discuss-the-proposal-for-an-international-pandemic-treaty>.

on a Framework Convention by that time.¹²⁰ Moreover, there needs to be greater clarity on the potentially very wide scope of such a treaty, in particular the type of enforcement mechanisms available to prevent governments from rejecting solidarity norms in the next crisis.¹²¹ As highlighted by the International Law Impact and Infectious Disease Consortium, the process to establish or reform pandemic governance instruments presents ‘an opportunity to reinforce norms of global solidarity and compliance with international legal obligations’.¹²²

Solidarity within countries

Governments should improve the social and economic conditions of disadvantaged groups in line with their commitments to the SDGs, and through meaningful engagement with civil society and community representatives.

The COVID-19 pandemic has reinforced the body of research that relates poor health outcomes to social and economic inequalities.¹²³ A major lesson from the experience of the pandemic is that an important measure of preparedness is to tackle these social and economic inequalities, which have grown in many countries in recent years for a number of reasons, including the consequences of the 2008 financial crisis. Such action will not only improve health, but also increase resilience to future pandemics. In 2015 world leaders endorsed the SDGs, the central undertaking of which is to ‘leave no one behind’. The objective of the SDGs, among other things, is to eradicate extreme poverty and provide social protection for all. In that context, a Global Fund for Social Protection, first proposed in 2012, might be a means to support countries in improving social protection and resilience for disadvantaged groups.¹²⁴

Governments should develop national solidarity plans to maximize protection for vulnerable groups through financial, social and healthcare measures during crises.

Governments could do little about existing inequalities when the pandemic struck: that requires long-term multisectoral action. But there were numerous things that could have been done in solidarity with the disadvantaged and vulnerable to mitigate the impact of the pandemic on them, and consequently on the rest

¹²⁰ World Health Organization (2021), ‘Special session of the World Health Assembly to consider developing a WHO convention, agreement or other international instrument on pandemic preparedness and response’, A74/A/CONF./7, 25 May 2021, https://apps.who.int/gb/ebwha/pdf_files/WHA74/A74_ACONF7-en.pdf.

¹²¹ Nikogosia, N. and Kickbusch, I. (2021), ‘A pandemic treaty: where are we now that the leaders have spoken?’, *BMJ Opinion*, 26 April 2021, https://blogs.bmj.com/bmj/2021/04/26/a-pandemic-treaty-where-are-we-now-that-the-leaders-have-spoken/?utm_campaign=shareaholic&utm_medium=twitter&utm_source=socialnetwork.

¹²² Wenham, C., Phelan, A., et al. (2020), ‘Reforming the Declaration Power for Global Health Emergencies under the International Health Regulations (2005)’, *International Law Impact and Infectious Disease (ILIAID) Consortium, IHR Reform White Paper Series (1)*, November 2020, <https://georgetown.app.box.com/s/w0u7k6dwb7404nfc87bxh34q90dpemn>.

¹²³ Marmot, M., Allen, J., Glodblatt, P., Herd, E. and Morrison, J. (2020), ‘Build Back Fairer: The COVID-19 Marmot Review’, *The Health Foundation*, December 2020, <https://www.health.org.uk/publications/build-back-fairer-the-covid-19-marmot-review>.

¹²⁴ De Schutter, O. and Sepilveda, M. (2012), ‘Executive Summary: A Global Fund for Social Protection (GFSP)’, October 2012, http://www.srfood.org/images/stories/pdf/otherdocuments/20121009_gfsp_execsummary_en.pdf.

of the population. For example, in many countries the poor and vulnerable were often unable to self-isolate when infected, or in contact with the infected, because their livelihoods depended on their going out to work. Lockdowns also disproportionately affect the poor and vulnerable, particularly where there are inadequate or no social safety nets offered. In a great many countries, there was an absence of any planning for such groups, resulting in inadequate protection for residents of care homes, migrant workers, asylum seekers, prisoners, the homeless and many others particularly at risk because of their living and working conditions. Protecting such vulnerable groups can be challenging even with the best will in the world, but in too many countries there was a tendency to turn a blind eye to them.

The pandemic has also demonstrated that even countries with hitherto admired health systems have been overwhelmed by uncontrolled escalation of infections. In many countries, public health measures have been the poor relation of healthcare provision, but the pandemic has demonstrated their critical role as part of a holistic health system. Health systems must therefore adequately invest in the infrastructure and capacities that have enabled many countries to suppress or even eliminate the virus, not only saving lives but also mitigating the heavy economic and social costs of lockdowns.¹²⁵ A unified health system should be able to prevent and control outbreaks and epidemics while also providing affordable and accessible health services. Health security must therefore be integrated into national health systems as part of universal health coverage (UHC). UHC was a policy endorsed by world leaders at the UN in a political declaration just four months before the onset of the pandemic, but planning and preparing for future epidemics are notably absent.¹²⁶

Governments, in collaboration with the leading scientific and public health communities, should provide clear and trustworthy communication to build public solidarity with crisis response efforts.

Although very important, solidarity with the poor and vulnerable is just one element in building solidarity in the whole population. The culture in many societies across Africa and Asia, and in Indigenous communities worldwide, for example, is far more community-minded than the societies in much of Europe and North America, with their prevailing individualistic climate. In some countries, particularly in these last two regions, there was a concern that the population would not countenance stringent measures. Yet, despite some well-publicized incidents and anti-lockdown demonstrations in a number of countries, this has mainly proved not to be the case. The key has been good communication from the political and public health leadership, and consistent messaging – including warning of the risks of inaction.

The quality of political leadership has proved to be a critical factor in tackling the pandemic. The ‘success’ stories, often in countries in East Asia and the Pacific region, have tended to occur where solidarity and mutual trust

¹²⁵ Lal, A., Erond, N. A., Heymann, D. L., Gitahi, G. and Yates, R. (2021), ‘Fragmented health systems in COVID-19: rectifying the misalignment between global health security and universal health coverage’, *The Lancet*, 397:10268: 61–67, 2 January 2021, [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)32228-5/fulltext#seccestitle60](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32228-5/fulltext#seccestitle60).

¹²⁶ United Nations (2019), ‘Political declaration of the high-level meeting on universal health coverage’, A/RES/74/2, 10 October 2019, <https://undocs.org/en/A/RES/74/2>.

have prevailed between public health officials and the governing politicians, and where the public health recommendations have been well explained to the public and acted on expeditiously. In countries most badly affected by the pandemic there have often been tensions between public health officials and politicians, which then undermine public trust and willingness to comply with measures. In some countries, politicians openly disagreed with recommendations over, for example, lockdowns and mask-wearing. In others there was not so much open disagreement as a tendency to delay taking recommended measures, in particular because of concerns about their economic impact (for example with lockdowns). In some cases, a minority of public health professionals supported political and other voices that were opposed to measures such as lockdowns, mask-wearing, testing and even vaccination.

Political institutions and systems around the world need to absorb the central lessons of this pandemic, based on the experience of countries that have responded most successfully.

The pandemic has overturned commonly held assumptions about preparedness and the resilience of health systems and societies. High- and upper-middle-income countries feature prominently in the list of countries worst hit by the pandemic, measured by deaths per million to date, while many low- and lower-middle-income countries have suffered a fraction of the burden. What the pandemic has revealed is the importance of factors other than wealth – or even health systems – in effective responses. Successful countries have recognized that even the best health systems in the world will be overwhelmed if the disease is allowed to grow unchecked, and there is no alternative to the determined implementation of traditional public health measures – test, trace, isolate and physically distance. The key to doing that successfully is to support and demonstrate solidarity with the populations that are adversely affected by the public health measures necessary to address the pandemic. A central lesson is the importance of collaborative and coordinated leadership – between political leaders of different persuasions, between public health professionals and academics, and between national and subnational authorities.¹²⁷

¹²⁷ Smith, R. (2021), 'What factors have determined how well countries have done in responding to the pandemic', *BMJ Opinion*, 21 May 2021, <https://blogs.bmj.com/bmj/2021/05/21/what-factors-have-determined-how-well-countries-have-done-in-responding-to-the-pandemic>.

Acronyms and abbreviations

ACDC	Africa Centres for Disease Control and Prevention
ACT-A	Access to COVID-19 Tools Accelerator
AfDB	African Development Bank
AFRO	Africa Regional Office (WHO)
AMSP	Africa Medical Supplies Platform
APSED	Asia Pacific Strategy for Emerging Diseases
ASEAN	Association of Southeast Asian Nations
CDC	Centers for Disease Control and Prevention
CEPI	Coalition for Epidemic Preparedness Innovations
COVAX	COVID-19 Vaccines Global Access Facility
COVID	coronavirus disease
C-TAP	COVID-19 Technology Access Pool
DG	director-general
EMA	European Medicines Agency
EU	European Union
FDA	[US] Food and Drug Administration
Gavi	Gavi, the Vaccine Alliance
GISAID	Global initiative on sharing all influenza data
HIC(s)	high-income country (countries)
HLIP	High-Level Independent Panel
IHR	International Health Regulations (2005)
Independent Panel	Independent Panel for Pandemic Preparedness and Response
JEE	Joint External Evaluation
LMIC(s)	low- or middle-income country (countries)
MERS	Middle East respiratory syndrome
ODA	official development assistance
PAHO	Pan-American Health Organization
PHEIC	public health emergency of international concern
PPE	personal protective equipment
SAGE	Scientific Advisory Group for Emergencies (UK)
SARS	severe acute respiratory syndrome
SII	Serum Institute of India
UNICEF	United Nations International Children's Emergency Fund
WAHO	West African Health Organization
WHO	World Health Organization
WTO	World Trade Organization

About the authors

Afifah Rahman-Shepherd

Afifah Rahman-Shepherd is currently a research fellow in health policy and systems research at the London School of Hygiene & Tropical Medicine (LSHTM). Prior to joining LSHTM, Afifah was a research associate at Chatham House, working within the Global Health Programme on global health governance, pandemic preparedness and response, and operationalizing the One Health approach.

Afifah's foundation in health security and infectious disease control has been enhanced by the diversity of her experience working with the National University Health Systems and Saw Swee Hock School of Public Health in Singapore, The Union's Asia Pacific Office, the Communicable Diseases Policy Research Group's Bangkok Office, and the Institut Pasteur in Paris.

Charles Clift

Dr Charles Clift is an economist who spent much of his career working for the then UK Department for International Development. Since 2001 he has focused on the role of intellectual property rights in relation to developing countries, in particular their impact on innovation in, and access to, healthcare products. In 2004–06 he was a staff member of WHO, working on a major report on intellectual property, innovation and public health.

Since joining Chatham House in 2010 Charles has conducted research and published on counterfeit and falsified medicines, the role of WHO in the international system, antimicrobial resistance, and latterly issues raised by Ebola and COVID-19. From 2010–20 he was a board member of the Medicines Patent Pool.

Emma Ross

Emma Ross is a senior research fellow in the Global Health Programme at Chatham House, where she works across the programme's portfolio, with a research focus on health security issues from sustainable biosecurity to outbreak management.

In addition, she is managing editor of the *Control of Communicable Diseases Manual* and serves as a writer, editor and strategic communications specialist for the Access to Medicine Index and associated indices.

Prior to this, Emma was a long-time medical correspondent at the Associated Press, on the front line of many major international health stories including outbreaks such as SARS and H5N1 Avian flu, global health challenges, and debates in public health policy and medical ethics. She subsequently headed news operations at WHO before joining Chatham House in 2010.

Lara Hollmann

Lara Hollmann was until June 2021 a research analyst with the Global Health Programme at Chatham House, working on health security issues with a focus on threats that arise at the human–animal–environment interface (One Health). She is now is a junior adviser on pandemic preparedness at GIZ (Deutsche Gesellschaft

für Internationale Zusammenarbeit). Her research focuses on global health governance as well as pandemic preparedness and response. She has an interest in health equity and the social determinants of health.

Lara previously worked at the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) at the European Commission, where she focused on humanitarian and global health policy; and for a local NGO in Battambang, Cambodia, delivering microfinance and capacity-building projects.

She holds an MSc in global health from the University of Copenhagen, with time spent at Kilimanjaro Christian Medical College in Moshi, Tanzania, and a BSc in development studies with a major in human geography from Lund University. She is a volunteer researcher for Global Health 5050.

Nina van der Mark

Nina van der Mark is a research analyst with the Global Health Programme at Chatham House, working on universal health coverage (UHC) and health system reforms. Her research is primarily focused on the political economy of UHC and accelerating health system reforms in low- and middle-income countries.

She previously worked as an international development professional, with a focus on health financing and advocacy in the fields of sexual and reproductive health and rights, youth participation, and maternal and child health. She has experience working with projects in Ethiopia, Nigeria and Bangladesh, as well as with larger regional projects.

Nina has a multidisciplinary background, and holds an MSc in population and development from the London School of Economics and Political Science, and a BA in liberal arts and sciences from University College Utrecht. She is a volunteer researcher for Global Health 5050.

Benjamin Wakefield

Benjamin Wakefield is a research associate with the Global Health Programme at Chatham House, where he works on health security issues, in particular those related to Africa.

His research is primarily focused on biological security and laboratory biosafety. He has a broader interest in chemical, biological, radiological and nuclear (CBRN) threats; and also works on civil–military relations in public health emergencies, and on the public health effects of conflict.

In addition to his role at Chatham House, Benjamin is an Emerging Leader in Biosecurity (ELBI) fellow in the Center for Health Security at Johns Hopkins University, and was a 2020 OSCE-UNODA Peace and Security scholar.

He holds an MSc in security studies from University College, London, a BA in international relations from Loughborough University, and a diploma in international studies from the University of Technology Sydney.

Dr Champa Patel

Dr Champa Patel has led the Asia-Pacific Programme at Chatham House since September 2017.

Before joining Chatham House, she was most recently the regional director/senior research adviser for South Asia and South East Asia and Pacific Offices for Amnesty International, responsible for managing research, campaigns, media and advocacy for the region.

Prior to her time at Amnesty, she worked in public health for almost a decade, with a focused on children at-risk, refugees, asylum seekers and internal trafficking.

Champa is an honorary professor at the University of Nottingham, and a board member for the International Detention Coalition; she also sits on the editorial board of *Human Rights Quarterly*.

Robert Yates

Robert Yates is a political health economist specializing in universal health coverage (UHC) and progressive health financing. He is executive director of the Centre for Universal Health at Chatham House. He is also an honorary associate professor at the London School of Hygiene & Tropical Medicine, and a long-term consultant to The Elders on their health programme.

Robert's principal area of expertise is in the political economy of UHC, with a focus on advising political leaders and governments on how to plan, finance and implement national UHC reforms. He has previously worked as a senior health economist with the UK's former Department for International Development and with WHO, advising numerous governments in Asia, Africa and Europe on health financing policy and health systems reforms.

Acknowledgments

The authors are indebted to all interviewees for their participation in the research and to the anonymous peer reviewers for their thoughtful and valuable feedback. We are also grateful for the advice and guidance of Osman Dar, Ngozi Erondy, David Harper, David Heymann, Helena Legido-Quigley and Mishal Khan. Thanks are also due to Chloe Sageman for shepherding the paper through peer review; to Frini Chantzi for her coordination of events linked to the project; to Claire Muñoz Parry for her management of the project; to the Chatham House publications team for their work in producing the paper; to Sharon Mah and colleagues at Soapbox for typesetting and design work; and to the Embassy of Japan in the UK for its generous support of the research that has informed the paper.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopying, recording or any information storage or retrieval system, without the prior written permission of the copyright holder. Please direct all enquiries to the publishers.

Chatham House does not express opinions of its own. The opinions expressed in this publication are the responsibility of the author(s).

Copyright © The Royal Institute of International Affairs, 2021

Cover image: Residents look on as an artist makes finishing touches to a mural depicting frontline workers carrying a COVID-19 vaccine in Kolkata, India, on 2 January 2021.

Photo credit: Copyright © Dibyangshu Sarkar/Contributor/Getty Images

ISBN 978 1 78413 481 5

This publication is printed on FSC-certified paper.
designbysoapbox.com



Independent thinking since 1920



The Royal Institute of International Affairs
Chatham House

10 St James's Square, London SW1Y 4LE

T +44 (0)20 7957 5700

contact@chathamhouse.org | chathamhouse.org

Charity Registration Number: 208223