

The World Health Organization (WHO) emerged from the ashes of World War II as a global institution which aimed to provide access to good health for all, regardless of socioeconomic status. This understanding of health was holistic, and included physical, mental and social well-being. The Alma Ata Declaration of 1978 reaffirmed these principles, enshrining community-based healthcare as at the core of decision-making.

Since 2000, however, WHO [AA1] has become increasingly dependent on private foundations and pharmaceutical companies for funding. As their influence has grown, the balance of power has shifted away from populations, represented by nation states.

This has coincided with a growing reliance on vaccine-based strategies to treat viral outbreaks, as seen in 2005, 2009, and most radically in 2020 with SARS-CoV-2. WHO amended definition of pandemics in 2009, enabling the promulgation of top-down policies including lockdowns in early 2020, contrary to its own guidelines published just months earlier. Unprecedented mass vaccination programmes followed, facilitated by an arbitrary change in the definition of 'herd immunity' that contradicted accepted immunological principles.

This top-down approach represents an abandonment of the community-based healthcare principles enshrined in the Alma Ata Declaration and in the founding charter of WHO. History has come full circle, with the current approach to global health resembling the sanitation measures of the 19th century, which were designed to protect the rich in the 'Global North' at the expense of populations elsewhere. We are witnessing a return to the inequalities of the colonialist approach that the post-war charter of WHO had sought to extinguish. COVID-19 has brought the growing contradictions within WHO to a head. Will global health policy continue to be controlled by a small cabal of wealthy countries, corporations and individuals, or will the principles of equality and personal autonomy prevail, returning power to the hands of the populations whom WHO was established to serve? The health of most of humanity - mental, physical and social - will depend on the outcome.

[AA1]I am standardising throughout on 'WHO' rather than 'the WHO'. When spoken, it is 'double-you aitch oh' or W-H-O, rather than 'the who'.



SECTION 1: WHO IS WHO?

An Egalitarian Birth

On 22 July, 1946, as the world reconsidered its priorities in the aftermath of World War II, the 51 countries of the nascent United Nations (UN), together with ten other countries, signed the constitution of a new global body. The World Health Organization (WHO) arose from the defeat of fascism and the death-throes of the old imperial world order with the intention of guiding and helping to manage the health of the world's population. Coming into force in 1947 when the twentieth country ratified the agreement, the new body was centred on a positive, holistic view of health.

The first 'guiding principle' of its Constitution stated:

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity".

The second principle underlined the new thinking emerging from the ashes of a war against ideologies of inequality:

"The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."²

The constitution also enshrined the importance of individual and community authority in the eighth of the nine guiding principles:

"Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people". 3

This latter principle would be further strengthened in subsequent WHO declarations involving WHO, such as the Alma Ata Declaration, as we will discuss later.

Thus a global body was put in place, controlled entirely by a council of nations - the World Health Assembly. Its purpose was to support the development, dissemination and implementation of policies aimed at improving the health of all, without distinction of wealth, political persuasion or social status. The institution was committed to the recognition of local need and involvement. It was inherently population-centred rather than industry-based, guided entirely by representatives of the political authorities of each member state.

These beginnings provide a reference point for understanding WHO today, and determining whether it has remained true to its charter

² ibid

and its roots. But first, to understand why its charter was so shaped, it is essential to understand the world from which WHO emerged.

A Colonialist Gestation

While WHO arose from the aftermath of the Second World War, the idea of a global effort to coordinate health policy began nearly a century prior, in a very different world setting and from a very different mindset. In 1851 the first International Sanitary Conference was convened in Paris, intending to find a way to harmonize maritime quarantine between European nations.⁴ This arose primarily to address recurrent cholera epidemics that had affected Europe in the previous decades. While the actual cause remained unknown, these epidemics were clearly due to an agent that spread through populations and across borders. Comprising the imperial powers in a colonial world, the conference convened under an international order within which it was acceptable to subjugate whole nations, at least beyond the confines of Europe. Slavery was still prevalent in former European colonies including the USA and Brazil, and officially implemented with the tacit approval of European states (e.g. The Netherlands, Portugal)⁶ where such practices were officially barred. Whilst these nations met in Paris ostensibly to work for the good of their own people, the reality was that they were openly implementing the subjugation, removal of freedom, and reduction in health of people elsewhere in the world for their own economic benefit.

A series of subsequent European Sanitary Conferences, which focused mainly on cholera, culminated in the First Sanitary Convention, which was ratified at the seventh conference in Venice in 1892. It was followed five years later by a further convention that addressed plague. The establishment of the *Office Internationale d'Hygiene Publique* in Paris in 1907 created the first permanent secretariat for international health matters for European nations. This reflected the establishment five years earlier of an equivalent in the Americas, the International Sanitary Bureau.⁷

When the League of Nations arose in the wake of World War I – a war essentially between European nations that was also fought in their colonies – a further health body, the Health Organisation of the League of Nations, was established in Geneva. Smallpox and typhus were added to the list of diseases specified under the International Sanitary Convention. While Japan was a member of the League, this was essentially a European affair, alongside the pre-existing Office Internationale d'Hygiene Publique. It dealt with outbreak diseases that posed a potential threat to wealthier European populations, as its American equivalent did across the Atlantic. Much of Africa and Asia at that time consisted of colonised populations feeding European prosperity, their lands providing a resource for growing

⁴ https://www.who.int/global_health_histories/background/en/

⁵ McCarthy M. A brief History of the World health Organization. THE LANCET · Vol 360 · October 12, 2002 · www.thelancet.com 6 https://www.reuters.com/article/uk-slavery-idUSL1561464920070322

⁷ McCarthy M. A brief History of the World health Organization. THE LANCET • Vol 360 • October 12, 2002 • www.thelancet.com

northern industry and consumerism, but their peoples lacking a say in the prioritization of international health.

As we shall see later, there are certain echoes of this imperialist /corporatist approach to the world and to health today, as centralization of health policy and the flow of benefit to northern wealthy populations has re-emerged as a theme in international health. We have perhaps gone full circle, but this was clearly not the intent of WHO's founders.

An age of innocence

World War II was a defining point for humanity. It caused or accelerated the break-up of empires (of Japan, Britain, and France) and heralded a 70-plus year distaste for authoritarianism and corporate hegemony in the West, and in many of the newly independent states that emerged from the end of European colonialism. The Nuremberg Code established a new emphasis on autonomy and the importance of individual consent. This was a departure from the coercion and mass compulsion that had characterized much colonial medical practice, and then reappeared in plain sight in Europe towards the end of the war.^{8 9}

A landmark was reached on 10 December 1948 when the United Nations General Assembly, meeting in Paris, proclaimed the Universal Declaration of Human Rights (General Assembly resolution 217 A) to codify the new thinking on global equality and individual autonomy. The original English version stated:

Article 1: "All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood."10

Article 2: "Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. (in part).11

> In its 30 articles, the Declaration bans slavery, and enshrines freedom of thought, of opinion and of religious expression, and freedom of movement within one's own country, and freedom to leave and return to one's country.

> It established a framework for countries to judge and be judged, and in particular a framework within which UN Agencies, including the nascent World Health Organization, should work. While authoritarian rule persisted, the Soviet Union and communist states also espoused,

¹⁰ https://www.un.org/en/about-us/universal-declaration-of-human-rights

at least officially, a belief in 'equality' of the masses, however shallow that would at times prove to be.

A political climate was thus established within which WHO could grow as a world health body controlled solely by countries through the World Health Assembly – all nations were recognized as equal, with each country having one vote. In line with the first guiding principle of its Constitution, WHO promoted a broad definition of physical, psychological and social health. While it was intended to be the primary advisory body for health matters globally, and included cross-border epidemics within its remit, the importance of local participation, societal health, and equality of access and control were enshrined within its structure and constitution. Meanwhile, the Nuremberg Code and Universal Declaration of Human Rights defined clear limits within which health services in general – and thus WHO – could institute measures to control endemic and epidemic diseases.

Over subsequent decades, WHO built disease-related programmes, particularly targeting infectious diseases of high burden, including smallpox, malaria, tuberculosis, and vaccine-preventable childhood diseases. The growing armoury of antimicrobials and vaccines, and the testing and mass trials required to ensure their safety, expanded the need to address the risks raised at Nuremberg. Large pharmaceutical companies and well-meaning but career-minded researchers were potentially conflicted in attempts to balance the rights of individuals and communities with the potential advantages of new therapies and preventives. The Helsinki Declaration of 1964 built on the Nuremberg Code, further defining the importance of free and fully-informed consent as prerequisites for health-related trials and the use of experimental treatments. This forms the basis of requirements for trials to this day.¹³

The World Health Assembly was dominated numerically by low and middle-income countries in Africa, Asia and the Western Pacific. As the Assembly controlled the WHO agenda, WHO prioritised the problems of high-disease-burden populations, specifically infectious diseases. Contemporary examples of primary healthcare innovation such as the 'bare-foot doctor' program of China from 1968 and similar health worker programs in Asian countries, greatly expanded basic healthcare and popularized the concept of bottom-up health management. Centred on a basically-trained but readily-accessible cadre of workers, who were often volunteers working in the communities from which they were recruited, this approach provided basic essential management, vaccination services, and health education. This movement was consistent with the central tenets of the WHO's charter of equality of healthcare access and local participation. It culminated in the International Conference on Primary Health Care at Alma Ata in Kazakhstan (then part of the Soviet Union) in September 1978, and the eponymous Declaration. that arose from it.

¹² https://www.who.int/about/who-we-are/constitution

¹³ https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/

Alma Ata and the Mission of WHO

In the Alma Ata Declaration, community-based primary care is central to the improvement of health. Furthermore, it promotes community control over central authorities that would impose health policies and mandate public health actions. 14 It is in many ways the natural culmination of the WHO charter and conventions of previous decades. It starts by reiterating the primary focus of healthcare, and therefore of UN agencies including WHO:

The Conference strongly reaffirms that health, which is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important worldwide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector.15

> The following clauses of the declaration establish the importance of local involvement and control as central to US and WHO health

Article III: ... The people have the right and duty to participate individually and collectively in the planning and implementation of their health care.

Article VI: (Primary health care) ... made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, ...¹⁶

Primary care, in Article VII(5): ... requires and promotes maximum community and individual self-reliance and participation in the planning, organization, operation and control of primary health care, ...

> The spirit of this democratic and rights-based approach to healthcare is reflected in the prologue of the Declaration, calling on WHO, UNICEF, national governments, non-government organizations and funding bodies to follow the principles it lays out. There is a notable absence of any mention of corporate or private interests or funding. WHO, and world health in general, was to be based on the concept

¹⁴ https://www.who.int/publications/almaata_declaration_en.pdf

¹⁶ https://www.who.int/publications/almaata_declaration_en.pdf

that people and their communities, would decide, guide, and control their health. The role of WHO and all international and national health agencies was to facilitate that process. Health was not an industry; it was a democratic, rights-based area of life encompassing physical, mental and social wellbeing, from which all should derive equal benefit.

BOX 1. THE STRUCTURE OF WHO

While the WHO is headquartered in Geneva, Switzerland, it includes 6 semi-autonomous Regions which have followed various degrees of autonomy over the years. While the Regional Office of the Americas, normally known as the Pan-American Health Organization (PAHO) evolved from the International Sanitary Bureau and pre-dates WHO itself, the remainder were established after the inauguration of WHO with boundaries having varied with the disengagement of French West African colonies as they gained independence (from the European Regional Office) and as conflicts resulted in changing international boundaries. The largest populations now lie within the boundaries of the Regional Office for the Western Pacific (WPRO - dominated numerically by China), the Regional Office for Southeast Asia (SEARO - dominated numerically by India) and the Regional Office for Africa (AFRO). These latter two include the highest burdens of infectious disease - traditionally the main focus of WHO - and so dominate much of the WHO's programmatic thinking through its history.

Each Region has its own health assembly (of country representatives) and commonly a technical structure reflecting that of the headquarters, and can act with a high degree of autonomy, though much direction and funding comes from the centre. In turn, most countries have a country office, headed by a WHO Representative (WR) or Country Liaison Officer (CLO). In the early decades of WHO, and in some countries today, these offices played an important role in guiding the growth of health services in newly-independent nations.

Loss of innocence

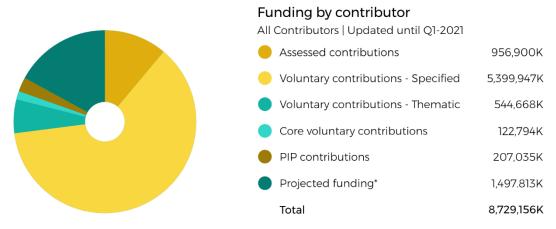
The directions and workings of humans in large organizations are inevitably influenced by their perception of the requirements for the organization's survival. As a UN body, WHO has been funded primarily by the countries it was set up to represent. This includes 'Assessed' contributions (core funding) and 'Voluntary' contributions. Assessed funding, currently about 20% of the WHO budget, 18 is based on GDP, assessed for all 196 current member states, and agreed by the UN General Assembly. 19 Most of the remaining budget is derived from voluntary contributions 20 provided by member states or other entities. These contributions may be 'unspecified' (for WHO to use as it sees fit), 'thematic' (e.g. for the malaria programmes of WHO), or 'specified' (for a specific project, meeting, or intended outcome). While WHO at its inception was primarily core-funded, by the first quarter of 2021, specified voluntary contributions comprised \$5.4

¹⁸ https://www.who.int/about/funding/assessed-contributions

¹⁹ https://www.who.int/about/funding/

²⁰ http://open.who.int/2020-21/contributors/contributor

billion, or 62% of its \$8.7 billion projected budget, and 75% of actual funds received. Assessed funding contributed only 11% to the total budget.²¹ Thus, the proportion of funding by nation states has declined over the years, as other forms of funding - together with their inevitable influence - have grown.



*Projected can be either core voluntary thematic/specified

Current WHO funding by contribution type.²²

BOX 2. WHO VOLUNTARY FUNDING*

Largest contributors:

Germany 11.97% (\$708M)

Bill and Melinda Gates Foundation 10.37% (\$624M)

US 6.91% (\$604M

EC 7.63%

GAVI 6.439

UK 635%

Other significant corporate/private contributors

PIP Framework contributors 0.92%

Bloomberg Family Foundation 0.43%

Sanoti-Aventis 0.29

Gilead Sciences 0.11

Rockefeller 0.11%

Merck and Co. 0.089

GlaxoSmithKline (GSK) 0.05%

*http://open.who.int/2020-21/contributors/contributor (as of June 25, 2021

The growing dependence on voluntary contributions, most of which are 'specified' to be used for certain programs, means that WHO policy and priorities are increasingly shaped by its major financial contributors. The ability to provide funds and specify their use means that a contributor can determine WHO strategy, if not WHO policy.

While many voluntary contributions come from countries, these are, not surprisingly, dominated by contributions from high-income nations. This allows these countries influence over WHO programs far beyond the one-country one-vote ethos of the World Health Assembly. More striking, though, is the increasing influence of private funders, either corporate stakeholders or Foundations, whose resources arise from and remain connected with the corporate world.

Outstanding among the funders listed in Box 2 is the Bill and Melinda Gates Foundation (BMGF), the second-largest voluntary contributor after Germany. They also contribute 17% of GAVI funding, second only to the UK. This makes a single family, who became wealthy through software, the largest private contributor of WHO voluntary funding, and second largest contributor overall.²³ As with wealthy countries, this organization can specify how its funds are used. Other significant contributors include pharmaceutical corporations (BOX ##), which contribute less overall, but are relatively influential in specific programs. The Pandemic Influenza Preparedness (PIP) Framework, the largest corporate-based contributor, is solely supported by pharmaceutical companies, namely Sanofi Pasteur (\$55,252,737), GlaxoSmithKline (GSK) (\$53,132,053), Hoffmann - La Roche and Co. Ltd. (\$51,073,654), Seqirus (\$17,876,129) and Novartis (\$15,292,743).²⁴

While non-state donors of WHO have grown in prominence, the organization has also seen a growing set of 'rivals' for the international health-aid dollar. UNAIDS was established amidst some controversy late last century to lead the international response to HIV/AIDS, a role that WHO would previously have played. In 2002, the Global Fund to Fight AIDS, Tuberculosis and Malaria (The Global Fund) arose from country contributions, and increasingly from private philanthropies led by the BMGF, to directly fund health programs addressing these three diseases within low and middle-income countries. The Global Fund budget is now over four billion dollars per year, funding that might traditionally have come directly from WHO.^{25,26} While most Global Fund support comes from governments, \$250 million per year comes from the BMGF.²⁷ Similarly, other agencies such as Unitaid have arisen to fund aspects of health in WHO's traditional area of focus.²⁸

Of particular significance to the current WHO pandemic response are two further international agencies. In 2000, the Global Alliance for Vaccines and Immunization, now 'Gavi, the Vaccine Alliance', was inaugurated primarily to fund vaccine procurement and dissemination to lower-income countries. Gavi is thus unashamedly a conduit linking large-scale pharmaceutical production with primary-level healthcare. It concentrates solely on provision of vaccines, rather than on the holistic view of health envisioned by the Alma Ata Declaration. The largest contributor to Gavi has been the BMGF,

 $^{23\} https://www.gavi.org/news-resources/document-library/annual-contributions-and-proceeds$

²⁴ http://open.who.int/2020-21/contributors/contributor

²⁵ https://www.theglobalfund.org/en/financials/

²⁶ https://www.theglobalfund.org/en/government/

²⁷ https://www.theglobalfund.org/en/private-ngo-partners/resource-mobilization/bill-melinda-gates-foundation/28 https://unitaid.org/#en

which has provided over \$4 billion, a billion dollars more than the next largest donor, the UK.29

More recently, in 2017, the Coalition for Epidemic Preparedness Innovations (CEPI) was founded in Davos by the governments of Norway and India, the BMGF, Wellcome Trust and the World Economic Forum (WEF). CEPI's mission is specifically to develop new vaccines for epidemics.³⁰ Again, while government donors led by Norway were the largest contributors at its inception, the BMGF and Wellcome Trust each contributed 13.4% of the total budget in 2018.³¹ While vaccines have made major contributions to improving global public health, and this continues to expand, the potential tension between this mission and the original more holistic mission of WHO is clear, particularly if WHO loses independence of thought regarding the place of pharmaceutical versus other interventions in addressing global health needs.

WHO originally subscribed to the principle of all countries having equal control, and championed primary care and the centrality of community control over healthcare. Today it finds itself in a position where much of its program direction is dictated by those who control its funding through voluntary contributions. With a budget of \$2.9 billion per year, it is also outspent by other health agencies in setting the agenda in the global health sphere.³² Wealthy northern countries, private corporations, foundations, and high-income individuals based in wealthy states, all with clear potential to profit from the commoditization of health and the centralization of health information, have become increasingly influential. It is striking how similar this situation is to the 19th century colonial past and the influences on health policy and trade that WHO sought to displace.

Challenges of the New Dynamic

WHO was born into a world that was breaking free from colonialism and emphasizing equality, the fundamental importance of human rights, and the unequivocal requirement to resist authoritarianism. The organization has largely existed during an age of public health based on the same principles. Yet it now finds itself facing a world that in some ways is difficult to distinguish from that controlled by the imperial-corporate power structures which it had sought to displace. Facing pressure from a growing number of rival agencies with greater funding, and having reduced control over its own budget, it has elected to accept specified funds from the rich, be they individuals, countries or corporations. In doing this, it has been necessary to abrogate its own constitution:

Article 37: In the performance of their duties the Director-General and the staff shall not seek or receive instructions from any government or from any authority external to

²⁹ https://www.gavi.org/investing-gavi/funding

³⁰ https://cepi.net/about/whowea

³¹ https://cepi.net/wp-content/uploads/2019/03/050319-Funding-and-Expenditure-Final_V3.pdf

³² https://www.who.int/about/accountability/budget/

the Organization. They shall refrain from any action which might reflect on their position as international officers. Each Member of the Organization on its part undertakes to respect the exclusively international character of the Director-General and the staff and not to seek to influence them.³³

It is hard for a mother in Burkina Faso to exert the same influence on WHO as a wealthy philanthropist in a Western country with tens of billions of dollars to give away. However, according to the Constitution of WHO, and the goal of the organization in striving for an equal opportunity for good health for all, that mother should perhaps have greater influence. WHO finds itself in a relationship with these funders that its constitution specifically aimed to avoid, and that raises conflicts for WHO and the funders themselves:

- It is difficult for a corporation to give large sums of money to another entity and not perform its duty to its shareholders in ensuring that those funds are used to improve the prospects of future profits for the company.
- It is difficult for the government of a wealthy country to provide an organisation with large sums of taxpayers' money without ensuring that it is used in ways that those taxpayers will see as beneficial, and that will not reduce their chances of re-election.
- It is difficult for a wealthy private philanthropist, with a background in Western corporate life, and no training or experience in primary healthcare or shared experience with those they wish to help, to allow their money to be used in ways they do not understand or see value in when their lack of experience leads them to see more value in other approaches.
- And it is difficult for a senior officer in WHO to turn down funding from an external source due to a perceived conflict of interest, knowing that in refusing the funding, a number of junior staff will need to be laid off, losing salary, healthcare, and even the right to live in their current home as a member of international staff.

But WHO must resist all such influences if it is to fulfill its purpose. There are many perfectly understandable pressures on a large health agency to compromise its principles in order to address short-term needs, and in order to maintain its seat at an increasingly crowded table. This is why organizations have constitutions and charters. They force us all to abide by certain principles that, in the cold light of day, we recognize as fundamental, and that cannot be compromised. These principles are normally enforced, at least in constitutional regimes, by a judiciary that is independent of the governing body. And this is monitored, in an ideal setting, by a media that prides itself on independence and freedom of thought.

UN bodies, including WHO, have no independent judiciary to oversee them. Where potential influencers also fund the media, or the issues involved are too distant and abstract to excite national populations, they are less likely to be held to account in the way that national governments are. Their integrity is entirely dependent on an insistence on transparency, and a broad consensus that certain rules are inviolable, and on the members of its governing body, the World Health Assembly, sharing an interest in maintaining that integrity. For WHO, maintaining integrity means prioritizing the health of the most vulnerable populations and ensuring that individuals at community level, not the wealthy and those with something to sell, remain decision-makers over their health.³⁴



SECTION 2: WHO AND RECENT PANDEMICS

The control of outbreaks across borders has been part of WHO's remit since its inception. In 1951, the International Sanitary Conventions were replaced by the International Sanitary Regulations (ISR). This document comprised a set of rules regarding international traffic, with the aim of managing the potential spread of infectious disease through shipping, air and land transport.³⁵

The regulations covered the spread of six infectious diseases – plague, cholera, smallpox, typhus and relapsing fever, and yellow fever (including control of *Aedes aegypti*, its mosquito vector). Whilst providing for the quarantining of infected individuals, it balanced these provisions against individual rights, disallowing the confinement or quarantine of those under surveillance for suspicion of exposure.

Article 27: A person under surveillance shall not be isolated and shall be permitted to move about freely.³⁶

The ISR were updated in 1969 and became known as the International Health Regulations (IHR).

In the late twentieth century, faced with an exponential growth in international trade and travel, WHO began a process to review the IHR. After the SARS outbreak in 2003, the IHR were fully revised through an Intergovernmental Working Group of all member states. The IHR (2005) were adopted by the Fifty-eighth World Health Assembly on 23 May 2005,³⁷ and entered into force on 15 June 2007.

A major change in this version of the IHR is its broad scope. No longer limited to a handful of potentially serious infectious diseases, the new regulations covered 'illness or medical condition, irrespective of origin or source, that presents or could present significant harm to humans'.³⁸ The IHR (2005) also greatly expanded the powers of WHO. As a result of the new regulations, the Director General, advised by an emergency committee that she/he appoints, has the power to declare a "public health emergency of international concern" (Article 15), and recommend that States parties implement various restrictions on movement of suspected and infected persons, including quarantine of suspects (Article 17).³⁹

However, at the same time, the new IHR clearly states that the 'human rights' of persons and travellers should not be contravened, and interruption of traffic and trade should be avoided⁴⁰ – setting up internal contradictions that would become apparent in 2020. Considerable power was vested in the Director General to issue recommendations of a highly restrictive nature that would, where

35 https://apps.who.int/iris/handle/10665/101391

36 ibid

37 ibio

38 ibid

40 ibio

implemented, contravene fundamental human rights and severely impact international travel and trade. This has been apparent throughout the response to COVID-19.

This historical context of WHO's transformation since the turn of the Millennium is vital to understanding its current position in the Coronavirus pandemic. The historical context of WHO's responses to recent infectious disease outbreaks is also vital to understanding the political and institutional pressures which have generated the policy response to COVID-19.

Since the start of the 21st century, there have been four epidemics which have constituted – or could have constituted – pandemics: the SARS epidemic in 2003, Avian Flu in 2005, Swine Flu in 2009, and COVID-19 in 2020. It is instructive to examine WHO policy and protocols during the responses to these respiratory diseases, and also the response of WHO to the Ebola epidemic in West Africa in 2014-5. It becomes clear that there are some continuities in terms of initial projections of impact and mortality between these outbreaks and COVID-19, but also strong differences when it comes to policy evaluations.

What emerges is that:

- WHO has a consistent record of excessive overprediction of the mortality burden likely to be caused by new infectious diseases at their onset. These predictions are driven by the science of computer modelling as it has developed over the first two decades of the new millennium.
- 2. There has been a decisive shift away from coordinated laboratory and etiological responses and the targeted vaccination programmes that were implemented at the start of the millennium, towards immense public health costs associated with universal vaccination programmes. These come at the expense of work on other diseases that pose a consistently greater risk for the general population, and which were the original priorities of the organization.
- 3. WHO has increasingly been criticised for the cumbersome nature of its bureaucracy and the way in which this has sometimes been seen to have impeded the speed of response to disease outbreaks.

SARS

The SARS (Serious Acute Respiratory Syndrome) virus took root in March 2003, when it was recognised as posing a potential global threat. As in the later iterations of Avian Flu, Swine Flu, and COVID-19, Case Fatality Rate (CFR) projections of both epidemiological computer modellers and WHO were very high. Computer modelling work suggested that the initial CFR was around 20-30% of infections within 14 days.⁴¹ In May 2003 WHO announced that the overall CFR was 14-15%, and the CFR for those older than 64 years was over 50%, which would place the disease on a level with Ebola.⁴² However, as

early as the middle of the following month the number of new cases reported had dwindled to just a handful of cases daily.⁴³ As the virus burnt out, WHO eventually concluded that a total of 8,098 people had been infected and 774 people had died as a result of infection from SARS.⁴⁴ While this CFR was high, it certainly did not equate with the global health risk that had been widely discussed earlier in the year.

One difference between the WHO-led response to SARS, and its response to Avian Flu, and in particular Swine Flu and COVID-19, was the place of vaccines. The US Centers for Disease Control and Prevention (CDC) did not make efforts to invest funds in the development of vaccines in order to control SARS. 45 Similarly, WHO made no comment about the development of vaccines. Instead, WHO's response was structured around the coordination of global and local efforts, the early identification and provision of PPE to key risk groups, and advice on case isolation, diagnostics of the disease, as well as tracking its spread. 46 Aetiology, laboratory diagnosis, monitoring of the disease spread, and field operations were at the centre of this global effort.⁴⁷ Epidemiology and laboratory networks were established, and global clinical networks moderated by WHO and shared web platforms allowed the sharing of experiences, ideas, and treatments. 48 All of these protocols were very much in line with its charter: and within four months, the outbreak was under control.

Avian Flu

When Avian Flu (H5N1) broke out in 2005, WHO again produced a range of mortality projections. One WHO spokesman, Dick Thompson, predicted that Avian Flu could kill between two and 7.4 million people. 49 However David Nabarro, then one of WHO's most senior figures, predicted that the range of deaths could be anywhere between five and 150 million people.⁵⁰ Another WHO spokesperson claimed that the "best-case scenario" was that 7.4 million people would die from the new infectious disease.⁵¹

In spite of the alarming upper limit of Nabarro's projection, WHO's figures, if anything, looked conservative compared to those emerging from disease modellers. Michael Osterholm. Director of the US Center for Disease Research and Policy, said that anywhere between 180 and 360 million people might die.⁵² Professor Neil Ferguson of Imperial College, London limited his estimate to 200 million people.⁵³

In the face of these predictions, a change in the global response emerged with the promotion of vaccines, and an interest in

- 43 https://www.who.int/csr/don/2003 07 04/en/.
- 44 https://cdc.gov/sars/about/fs-sars.html.
- 46 https://www.ncbi.nlm.nih.gov/books/NBK92476/.
- 47 Ibid
- 48 Ibid.
- 49 https://abcnews.go.com/GMA/Flu/story?id=1172638.
- 50 https://www.theguardian.com/world/2005/sep/30/birdflu.jamessturcke.
- 52 https://abcnews.go.com/GMA/Flu/story?id=1172638.
- 53 https://www.theguardian.com/world/2005/sep/30/birdflu.iamessturcke

stockpiling vaccines and antiviral drugs, the latter exceeding what had occurred during SARS. However, unlike the subsequent situation with both H1N1 (Swine Flu) and COVID-19, there was never any plan to vaccinate the whole population. The UK sought to secure two million vaccines to vaccinate key workers. ⁵⁴ French company Sanofi-Pasteur had developed 1.4 million doses by the end of 2005 and had contracts to deliver the vaccine to Australia and the US. ⁵⁵ In Germany the government committed 200 million Euros to vaccine research. ⁵⁶ But none of this was intended for the population as a whole.

In fact, only 257 people died worldwide from Avian Flu.⁵⁷ Curiously, however, this did not stop David Nabarro, when he was appointed UN coordinator for Avian and Human Influenza in 2012, from repeating exactly these same projections of between five and 150 million dying from Avian Flu pandemic, and the most reasoned estimate being 7.4 million deaths.⁵⁸

Swine Flu

The H1N1 Swine Flu outbreak of 2009 provides the most recent example of WHO's response to a completely new infectious respiratory disease. Swine Flu broke out in Mexico in the first months of 2009. WHO played a strong role in initial high predictions of mortality and infectiousness, with a predicted global death toll of 7.5 million people. ⁵⁹ Senior figures at the organization claimed that up to two billion people worldwide might become infected – then just under one third of the entire world population. ⁶⁰ Among those sitting on the WHO emergency committee for the outbreak was Professor Neil Ferguson of Imperial College, London, one of the modellers whose predictions lay behind this estimate. ⁶¹

Having redefined the term "pandemic" by removing the reference to "enormous numbers of deaths and illnesses" 62, WHO declared a pandemic in June 2009. This automatically activated pre-negotiated pandemic vaccine contracts that a number of wealthy countries had developed in the preceding years with vaccine manufacturers. This led to some politicians claiming that the event had proved a windfall for pharmaceutical companies 63 – needlessly, as it turned out, since the Swine Flu pandemic did not kill enormous numbers of people as predicted. In the end, there was a significant amount of overprediction in these models, and a study published in *The Lancet* concluded that the total mortality caused by H1N1 was between

⁵⁴ https://www.theguardian.com/uk/2005/jul/21/birdflu.immigrationpolicy.

⁵⁵ http://news.bbc.co.uk/l/hi/health/4380014.stm

⁵⁶ Ibid..

 $^{57\} https://www.reuters.com/article/us-flu-pandemics-sb-idINTRE53N5Q520090424.$

⁵⁸ https://www.independent.co.uk/news/world/politics/who-tries-to-play-down-expert-warning-of-150-million-deaths-from-flu-pandemic-316374.html.

 $^{59 \} https://www.independent.co.uk/life-style/health-and-families/health-news/billions-wasted-swine-flu-pandemic-never-came 1974579.html.$

⁶⁰ https://www.cbsnews.com/news/dire-predictions-for-swine-flus-future/.

⁶¹ https://www.theguardian.com/world/2009/may/12/swine-flu-report-pandemic-predicted.

⁶² https://www.who.int/bulletin/volumes/89/7/11-086173.pdf

⁶³ https://www.statnews.com/2019/06/11/h1n1-swine-flu-10-years-later/.

151,700 and 575,400 people, roughly on a par with annual deaths caused by seasonal influenza.64

WHO faced severe criticism for its handling of the response, which had blunted the attention given to other diseases, and led WHO figures in other fields to accuse the organization of a giant misallocation of budgets. Others feared that corporate interests had played too prominent a role in the pandemic policy. The British Medical Journal conducted research which revealed conflicts of interest among key advisers who had also taken paid consultancy work from vaccine manufacturers who stood to profit from the declaration of a pandemic. 65 As The Independent (UK) reported in October 2011, in a article entitled Billions wasted on Swine Flu Pandemic That Never Came: "The second charge, prominently made by Dr Wolfgang Wodarg, the former head of health at the Council of Europe, is that the WHO is unduly influenced by the drugs industry, which stood to make a fortune from selling antivirals and vaccines. The Swiss giant Novartis, for example, saw its profits jump by nearly a third in the first quarter of this year to \$2.95bn, much of it from delivering swine flu vaccines ordered last year."66

In short, the H1N1 outbreak saw the rollout of the first attempt at a universal vaccination programme for a new respiratory disease - a model for the response to COVID-19 that has unfolded. At the time, some critics associated this with the growing role of pharmaceutical companies in WHO, many of whom reaped great profits from developing a vaccine, which in the end was not needed. Indeed, as we have seen, this universal vaccination programme had not been proposed during the recent 2005 Avian Flu outbreak, and vaccines had not been mooted at all during the SARS outbreak of 2003. Meanwhile, WHO had redefined the term "pandemic" in a way that enabled a swifter declaration of a pandemic, triggering lucrative vaccine contracts for pharmaceutical corporations.

Ebola in West Africa

The first case of Ebola in West Africa appears to have entered the human population in December 2013 in the south-west of the Republic of Guinea, near its borders with Sierra Leone and Liberia. The outbreak was not officially declared until late March 2014, which allowed the virus to circulate for three months within all three countries.⁶⁷ While unofficial reports claimed that there had been a number of Ebola fatalities in Monrovia and Guinea between March and May, WHO accepted at face value declarations by Liberian and Guinean officials at the end of May that the outbreak was almost over. 68 Moreover, WHO was severely criticised afterwards for poor regional and international cooperation deriving from its structural framework. While by 5 May, 90 WHO staff had been deployed in

⁶⁴ https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(12)70121-4/fulltext.

⁶⁵ https://bmi.com/content/340/bmi.c2912.full.

⁶⁶ https://www.independent.co.uk/life-style/health-and-families/health-news/billions-wasted-swine-flu-pandemic-never-came

⁶⁷ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7122988/

Guinea, by that date only 20 had been deployed in Liberia and one in Sierra Leone.⁶⁹ Moreover, it was later found that there had been active resistance at WHO headquarters in Geneva to declaring the outbreak a global health emergency, for fear of antagonising the affected countries.⁷⁰

Thus, in sum, Ebola revealed structural weaknesses in WHO's response to an epidemic crisis. There was a notable failure to challenge the narratives of the countries concerned, and of WHO's internal structure. The organization faced heavy criticism for being slow to respond to the crisis, which, unlike the preceding influenzae events and the current COVID-19 pandemic, was not a significant threat to the populations of developed nations.

To summarize, the responses of WHO to epidemic outbreaks in the first two decades of the 21st century are historically significant both in the context of the response to the outbreak of COVID-19, and to the associated changes to WHO's funding model over the same period of time.

In the first place, WHO's responses to SARS, Avian Flu, and H1N1 revealed several aspects which have been embedded in the response to COVID-19:

- Highly inaccurate mortality and infection predictions derived from computer modelling, alongside the repetition of these models for a number of years by senior WHO figures even though proven inaccurate;
- 2. A growing interest in the development of mass vaccination programmes as a response to new infectious diseases, and a corresponding decline in the efficiency of WHO's structural responses and collaboration within countries to address new infectious diseases, as had been demonstrated during the 2003 SARS outbreak;
- 3. Sensitivity to criticism of their failure to act quickly enough to halt the spread of new disease outbreaks, as manifested most particularly during the 2014-5 Ebola outbreak in West Africa.

All of this historical and institutional memory was relevant to the way in which WHO developed its response to COVID-19. It appeared that, due to the historical and political context, by 2020 few within the organization were able to acknowledge one of the salient analyses that emerged to response to the H1N1 outbreak of 2009:

"Importantly, however, it took a number of months after the disease's identification in April 2009 before the lethality of the virus could be accurately determined. Concern over the severity of the virus and the risk to communities was also exacerbated by international media reports, particularly in the initial weeks; until sufficient data had been gathered and interpreted, it was unclear what measures were required to contain the disease and prevent unnecessary human morbidity and mortality. 77



SECTION 3: WHO IN THE TIME OF SARS-COV-2

The response of WHO to SARS-CoV-2 can best be understood through the prism of the historical framework outlined in Sections 1 and 2, as well as in the context of specific questions of power and political influence, which have emerged in global institutions over the past decade. A clear conflict emerges in WHO's response to the COVID-19 outbreak, between pre-existing scientific research on the one hand, and political imperatives on the other. This has been resolved by WHO's leaders who have chosen the path of least resistance and followed the demands of political imperatives.

What emerges is that:

- On the basis of a one-week field visit to the affected areas of China in mid-February 2020, WHO implemented as a global policy the Chinese model for containing SARS-CoV-2; however, this model contradicted all previous research into the best ways to mitigate outbreaks of new infectious diseases, including research that had been published by the WHO itself just two months before.
- 2. No control was implemented to assess the efficacy of the Chinese model of virus containment; this meant that this new policy was implemented in contravention of universally accepted norms and standards of scientific research.
- 3. WHO made urgent new recommendations mandating extraordinary measures, which its own published research had stated should not be implemented under any circumstances, namely: contact tracing, isolation and quarantining of asymptomatic cases, and border closures.
- 4. A policy emerged emphasizing top-down mass population vaccination on an unprecedented scale. This was coupled with deemphasis and even suppression of the proposed use of low-cost repurposed drugs shown by WHO to have high safety in large-scale use for other diseases, as well as previously-accepted health norms of nutrition, sunlight and exercise.

Non-Pharmaceutical Interventions

In December 2019, WHO published an important document entitled Non-pharmaceutical Public Health Measures for Mitigating the Risk and Impact of Epidemic and Pandemic Influenza. It was based on several years of research by a team of scientific experts led by the WHO Collaborating Centre for Infectious Disease Epidemiology and Control, in the School of Public Health at the University of Hong Kong.⁷² Published just three months before the declaration of SARS-CoV-2 as a pandemic, this document provides an overview of the latest scientific thinking within WHO as to the best way to mitigate

outbreaks of novel respiratory diseases. The document presents the state-of-the-art scientific research on these matters prior to 2020.

The December 2019 document was in line with latest research, and also conformed to the International Health Regulations of 2005 (IHR). As the report noted: "Under the IHR (2005), governments are entitled to implement public health measures to protect the health of their populations during public health events respecting three golden rules, which are that such measures must be based on scientific principles, respect human rights, and not be more onerous or intrusive than reasonably available alternatives". The report was also careful to balance health costs with the wider economic and social costs of intrusive measures, noting that: "The most costly strategy considered in a simulation study was that of a continuous school closure together with a continuous 50% workplace non-attendance; this scenario has the highest overall cost (US\$ 103 million) and the highest cost per prevented case (US\$ 9894 per case)." The cost of the cost of

Contact Tracing

The December 2019 report was clear that Contact Tracing was "not recommended in any circumstances" Ethical issues were cited as a major reason for wariness regarding this intervention, including the inefficient use of resources (including human resources), and equity; the authors of the report also found that evidence for the overall efficacy of contact tracing was limited. Once the process had been rolled out worldwide in 2020, the validity of these concerns was made clear; one February 2021 study from the UK showed that in spite of the vast associated costs and paralysis of normal life, contact tracing had only reduced overall infections by between 2% and 5%.

Asymptomatic Individuals and Face Masks

The December 2019 report recommended the use of face masks by symptomatic individuals in all cases of a new respiratory virus; in cases of high levels of severity, the report recommended a generalised use of face masks by the public, including those without symptoms. However, the authors of the report made it clear that "understanding of transmission dynamics is incomplete, including the importance of pre-symptomatic contagiousness (133) and the fraction of infections that are asymptomatic (134). Robust evidence" was lacking for "the asymptomatic fraction among all infections".

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73 Ibid., p. 10.
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 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/960110/RUM_model_technical_annex_final_100221.pdf, p. 19$

⁷⁴ Ibid., p. 55.

⁷⁵ Ibid., p. 3. 76 Ibid., pp. 37-8.

⁷⁷

⁷⁸ https://apps.who.int/iris/handle/10665/329438, p. 3.

⁷⁹ Ibid., p. 43.

⁸⁰ Ibid., p. 48.

Quarantine Measures

WHO also felt that there were strong ethical concerns regarding quarantining of asymptomatic individuals: "As with isolation, the main ethical concern of quarantine is freedom of movement of individuals (139). However, such concern is more significant for quarantine because current evidence on the effectiveness of quarantine varies, and the measure involves restriction of movement of asymptomatic and mostly uninfected individuals. Mandatory quarantine increases such ethical concern considerably compared with voluntary quarantine (128). In addition, household quarantine can increase the risks of household members becoming infected (114, 137, 138)."81

School Closures

The December 2019 report recommended school measures and closures in cases of a new epidemic with high severity. ⁸² However it noted that school closures were potentially not cost-effective, with the costs of closures of even a few weeks potentially reaching 1% of the GDP of G7 economies. ⁸³ The ethical considerations for school closures were severe, making them an option of last resort rather than something to implement at once. ⁸⁴ Nevertheless, the WHO report did recommend these closures in cases of severe epidemics and pandemics, while stating that, rather than full closure, a policy of "class dismissal" was preferable, where schools remained open for administrative staff, and children of low-income families and essential workers. ⁸⁵

While making this recommendation, the WHO report made it clear that these measures should be time-limited, stating: "Coordinated proactive school closures or class dismissals are suggested during a severe epidemic or pandemic. In such cases, the adverse effects on the community should be fully considered (e.g. family burden and economic considerations), and the timing and duration should be limited to a period that is judged to be optimal". Be A definition of "optimal" is not provided, but the question of ethical concerns and the financial burden on society, and the tone of the report, make it clear that school closures for an entire academic year were not envisaged.

Border Closures

The report noted the enormous economic costs which would be associated with border closures. These would be likely to have severe

⁸² Ibid., p. 3.

⁸³ Ibid., p. 51.

⁸⁴ Ibid.. 85 Ibid., p. 52.

⁸⁶ Ibid..

impacts on socioeconomic wellbeing, and potentially on the general availability of foodstuffs: "No costing studies on border closure were identified; however, the cost will be prohibitive in most countries because of the closure of borders (air, land and sea). Substantial public resources would be needed, including the provision of public advice and large numbers of staff to restrict cross-border travel. Furthermore, there would be consequences for the supply chain for food and essential medicines, as well as broader economic consequences."⁸⁷

These considerations contributed to the overall conclusion that border closures were not recommended under any circumstances. 88 The only exception was that "border closures may be considered only by small island nations in severe pandemics and epidemics, but must be weighed against potentially serious economic consequences". 89 The report's authors thus made clear their understanding that national health related not only to a particular new virus in circulation, but also to broader socioeconomic conditions in society.

Migrant Workers and the Global Poor

As the passage on border closures clarified, an important aspect of the December 2019 report was the way in which it balanced the health impacts of a new pandemic with the socioeconomic cohesion and needs of a society. In particular, the report made it clear that a one-size-fits-all policy raised ethical considerations for the Global Poor: "Ethical considerations: The human right to freedom of movement should be considered, as should potential adverse economic impacts, particularly in vulnerable populations such as migrant workers and individuals who need to travel to seek medical attention."

Lockdowns

The December 2019 report made not one reference to the implementation of lockdowns.

The emergence of SARS-Cov-2 in China and the WHO response

When SARS-CoV-2 emerged in Wuhan, China, in January 2020, and the initial lockdown was implemented in Wuhan on January 23, the WHO representative in China, Gauden Galea, declared to the Associated Press that "the lockdown of 11 million people is unprecedented in public health history so it is certainly not a recommendation that the WHO has made". 91 Given that the concept

87 Ibid., p. 68.

88 Ibid., p. 3. 89 Ibid., p. 4.

89 Ibid., p. 4. 90 Ibid. p. 66

91 https://www.reuters.com/article/us-china-health-who-idUSKBN1ZM1G9

of a lockdown had not even been mentioned in the December 2019 report, there were many aspects of it that were indeed in contravention of the existing WHO guidance. Nevertheless, within little over a month, the Chinese approach had become WHO policy for all countries around the world, regardless of their circumstances.

Several key steps occurred en route to this outcome:

- 1. On January 28th, a high-level WHO delegation led by the Director-General Tedros Adhanom Ghebreyesus visited Beijing and met with Chinese President Xi Jinping.⁹²
- 2. Two days later, Ghebreyesus reconvened the WHO's Emergency Committee and a Declaration was made that SARS-CoV-2 should be classified as a Public Health Emergency of International Concern.⁹³
- 3. A joint mission of medical experts was dispatched by WHO to visit China from February 16 to 24, to consider the Chinese response. 94
- 4. This team published a report on February 24.95 It recommended following wholesale the policies that had been developed in China, even though these policies breached the December 2019 report in several ways, especially as regards the implementation of contact tracing and quarantining of asymptomatic individuals; and even though these policies took no account of the socioeconomic conditions of different countries, as the December 2019 report had done.

The report was co-authored by the joint leaders of the mission: Dr Bruce Aylward of WHO, and Dr Wannian Liang of the People's Republic of China. 96 Aylward is a Canadian physician who has worked for many years at WHO. A controversy flared up one month later, when Aylward was interviewed on a Hong Kong radio station and was asked about the status of Taiwan in the WHO. Aylward pretended that he had not heard the question, and when it was repeated and he was asked to comment on how Taiwan had done so far, he responded, "We have already talked about China". 97

The response to the outbreak in China in some ways reproduces existing elements of WHO policy that emerged during the Ebola outbreak, when an unwillingness to offend countries in which new infectious disease outbreaks take place was also seen. However, there was also a new element in the WHO response. Never before had an entirely new experiment to suppress a new infectious disease been approved for universal application on the basis of such a short period of research, and without a scientific control to the experiment. This may be because Chinese influence in WHO was certainly strong in the run-up to the outbreak of COVID-19, since the Director-General Tedros Adhanom Ghebreyesus had been appointed with strong Chinese support. 98 Chinese influence can also be seen in the WHO's initial dismissal of reports that COVID-19 could have emerged from a

⁹² https://www.who.int/news/item/28-01-2020-who-china-leaders-discuss-next-steps-in-battle-against-coronavirus-outbreak 93 https://www.who.int/news/item/27-04-2020-who-timeline—covid-19.

⁹⁴ Ibid..

⁹⁵ https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf.

⁹⁷ https://www.rthk.hk/tv/dtt31/programme/thepulse/episode/619602.

⁹⁸ https://www.washingtonpost.com/news/democracy-post/wp/2017/10/25/another-week-another-scandal-at-the-united-nations/.

Wuhan lab leak, something which is becoming ever more accepted as a likely source of the SARS-COV-2 virus.⁹⁹

Thus, after a couple of weeks of observation by a small committee in a country with very limited transparency, years of evidence-based pandemic recommendations were reversed by WHO. This reversal ignored the known socioeconomic and health-related harms that WHO had previously identified, particularly to low-income populations who had previously been the main focus of WHO's efforts.

Conclusion

While the response to China was in keeping with the WHO's recent history and its current institutional profile, other elements of the WHO response also show how much the institution has moved from its original foundational principles developed after World War II.

The shift to lockdowns was unprecedented, while the idea of mass vaccinations in response to a pandemic, to be rolled out worldwide, had grown slowly as a policy response only in the first decades of the 21st century. In contrast, low-cost treatment and re-purposing of existing drugs, of particular interest to low-income populations, received little attention from WHO. The fact that COVID-19 policy has taken centre-stage, over and above the health needs of poorer countries, where COVID-19 is but one of many health concerns and generally of relatively low burden, reveals just how far WHO has strayed from the principles of its original founding charter.

The oft-repeated WHO slogan: "no one is safe unless everyone is safe",100 is readily refuted, as COVID-19 severity and mortality are highly concentrated on a clearly defined subset of the population who are elderly, obese and with specific co-morbidities101,102. These high-risk people tend to be concentrated in wealthier countries or as population subsets, while the burden of restrictions falls most heavily on those with low incomes and few reserves to fall back on. This approach is thus imposing costs and risk on the poor for the perceived benefit of the wealthy. This is close to the antithesis of WHO's founding principles.

The impact of lockdowns on healthcare access, education, nutrition, women's empowerment, and economic independence of low-income and minority groups is enormous. Resource diversion for mass vaccination, both monetary and human, will further exacerbate this harm in regions such as in sub-Saharan Africa, where half the population is below 19 years of age and less than one per cent are older than 70.¹⁰³ The WHO pandemic guidelines were clear that community participation is critically important, and public trust must be built and maintained.¹⁰⁴ ¹⁰⁵ ¹⁰⁶ And yet no community participation has been invited from the world's poorest to debate the top-down pandemic response, nor the question of vaccinations, treatments, and the relative balance of COVID-19 risk and other health risks in their societies.

It is hard to separate these policy priorities from the shifting balance of funding, which WHO has experienced in recent decades. The growing interest of private individuals and of corporations seeking to promote pharmaceutical treatments, has seen the expansion of these approaches in response to pandemics, to the exclusion of

¹⁰⁰ https://www.who.int/initiatives/act-accelerator/covax

¹⁰¹ https://www.cdc.gov/nchs/covid19/mortality-overview.htm

¹⁰² https://www.cdc.gov/obesity/data/obesity-and-covid-19.html

¹⁰³ https://population.un.org/wpp/Download/Standard/Population/

¹⁰⁴ WHO, Pandemic influenza risk management: A WHO guide to inform & harmonize national & international pandemic preparedness and response, 2017

¹⁰⁵ WHO, Addressing ethical issues in pandemic influenza planning: Discussion papers, 2008, paper II:29-65

¹⁰⁶ WHO, Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza, 2019

virtually all other public health measures such as education and prevention to improve metabolic health, which is a major risk factor for COVID-19. And yet the potential for conflicts of interest are obvious. Pharmaceutical interventions that benefit certain sources of funding are favored over generic and non-pharmaceutical alternatives; certain approaches to data management are favored over other priorities; and there are requirements to partner with 'global health' organisations in high-income countries rather than those from countries where need is greatest. Indeed, to avoid such conflicts, WHO would have to refuse much funding from, and collaboration with, other, richer, agencies. This may be seen as untenable when donors are common to both parties.

Moving away from this model, and back to the founding principles of WHO and Alma Ata, will require an enormous collective effort. In the first place, an honest appraisal of WHO's catastrophic policy failings during the SARS-CoV-2 pandemic needs to be made. These can then form the basis of future policy recommendations.

These recommendations will be varied, but they should include:

- 1. The refusal of donor funding for specific programmes: all funds should be allocated to one account, from which they can be distributed according to need.
- 2. Establishment of population-based mechanisms for health prioritization, rather than dependence on the whims of major donors. It must become impossible for wealthy individuals or corporations to dictate the health policies of others, whether or not they reap direct benefit from doing so.
- 3. Re-establishment of the federal system of accountability and voting rights intended by the 'one country-one vote' structure of the World Health Assembly, so that the perspectives of poorer countries carry equal weight to those of countries enriched by past colonial and global structures.
- 4. Restructuring of WHO such that the core principles of community, of personal control and responsibility for health, of equality for all peoples, and of the broad definition of health enshrined in the WHO charter, become inviolable. The domination of the healthcare of the many by a few nations or individuals must not be seen again.

At the time of writing, the circle of history is complete. The world has returned to the exclusionary and imperial values, which it last saw in the 19th century, that are designed to protect the Global Rich.

In acquiescing to the devastating transformations that this paper has outlined, WHO has become an empty shell of its former self. By following the path of least resistance and obeying the dictates of corporate and technocratic power in the 21st century, it has presided over an entirely novel response to an infectious disease, which was implemented without any scientific control or cost-benefit assessment.

