



The World Health Organization: an Institutional Review

Background paper 15

The Independent Panel for Pandemic Preparedness and Response

May 2021

The
Independent
Panel
FOR PANDEMIC
PREPAREDNESS
& RESPONSE



Table of Contents

1. Summary	3
2. Methodology	6
3. WHO – background	8
3.1 Role and Mandate	8
3.2 Leadership and Governance	9
3.3 Finances	10
3.4 General Programme of Work (GPW)	12
3.5 WHO Emergency Programme and Pandemic Preparedness and Response	13
3.6 The International Health Regulations (2005).....	15
3.7 The Transformation Agenda	16
3.8 The role of WHO within the international system	18
4. Overarching Institutional Questions	20
4.1 Does WHO have the right mandate and functions for pandemic preparedness and response? 20	
4.2 Does the organization have the right structure and capacity to deliver on its mandate?	23
4.3 Is the financing of the organisation optimal and appropriate?	25
4.5 Does the Director-General have the relevant authority to ensure WHO’s mandate, especially during a health emergency?.....	33
4.6 What has been and what should be WHO’s role in the international system at large?	36
4.7 In what way has the present political environment affected WHO’s performance?	39
4.7.1 WHO Regional Office for Africa (AFRO)	42
4.7.2 WHO Office for the Eastern Mediterranean (EMRO)	42
4.7.3 WHO Regional Office for Europe (EURO).....	43
4.7.4 The Pan American Health Organisation (PAHO)/AMRO.....	44
4.7.5 WHO Regional Office for South-East Asia (SEARO)	45
4.7.6 The WHO Western Pacific Region (WPRO)	45
Research	47
Communication	50
References	51

This paper has been prepared by the Secretariat to the Independent Panel for Pandemic Preparedness and Response as background for the Panel. The views expressed herein do not necessarily represent the views of the Panel.

1. Summary

WHO is at the center of the international system for prevention, preparedness, and response to a global health emergency. The work of WHO during the COVID-19 pandemic has been at a substantively different scale and level compared to the initial time of the EVD outbreak in West-Africa 2014. WHO's capacity and competence as it responds to one of the largest health crises in modern time is laudable. But there is always room for improvement and there are aspects of WHO's performance that render reflection and change.

In analyzing WHO's performance, the Independent Panel considered what its leadership role entails, what kind of a coordinating mandate WHO should have, how operational the organization should be and what authority it holds to ensure transparency of information and decision-making. The analysis has been based in a series of interviews with experts within and outside WHO, roundtable discussion and literature reviews.

The Panel concludes WHO's **mandate should be** focused on activities where it provides **true added value, where it makes the most use of its core competencies, and where there is less overlap with the mandate of other actors in the busy and crowded global health space.**

In summary, our analysis of WHO's role and work during the COVID-19 pandemic shows that **its broad and idealistic mandate according to the constitution and its functions makes it hard to fulfil many key functions equally satisfactorily** as the work today more than before ranges from being the leader, convener and coordinator, to the technical lead and to the provider of operational support. WHO's member states have the ultimate responsibility to defining the mandates and functions of the organisation

There is room for improvement in **how WHO's recommendations and technical guidelines are communicated** to ensure better uptake by relevant partners and governments. This is especially important for the initial phase of formulation where the evidence base is still evolving, and scientific clarity has not yet been fully established.

During a health emergency such as a pandemic, the Director-General appears to have many of the necessary authorities, formally and legally, to perform expected tasks, both for internal decisions and for communicating with and guiding the world at large. In fact, there are many challenges for the Director General to actually use the authority to fulfill WHO's mandate and put people's health in front of politics. Those include the constrains the IHR requirements impose on the possibilities to act.

The **political environment of Members States** and especially the ones with more financial resources and political clout can make more difficult the ability of the Director-General to fully execute his/her powers. It seems obvious that WHO, and ultimately the Director-General, should have clearly defined authority to act and that respect for the independence and integrity

of the organization is essential. It is equally important to maintain the full accountability of the Director-General for her/his performance to the relevant governing bodies.

The way WHO is financed today seriously impacts the quality of the organization's performance, and many of the fundraising processes have significant transaction costs. Most importantly, its financing is a major **risk for the integrity and independence** of the work of the organization, as it for all organizations in global health that are financed largely from voluntary contributions. Attempts during the last decades to "mend" and improve based on the present model have not been successful. The COVID-19 pandemic has unveiled some of these fundamental issues, particularly in relation to WHO independence, flexibility, and agility in providing the necessary support. Through ongoing politicization of WHO and the budgetary constraints clearly linked to earmarked funding, Member States have the effect of underpowering the organization to fulfil the wide range of functions they expect of it. While the stimulus packages and furlough schemes used by governments in response to COVID-19 have cost trillions worldwide, investment in global health and into WHO is negligible in comparison. A radical reform is urgently needed.

WHO has a **complex and not fully efficient and responsive governance structure**, which is not fit for a crisis of the present magnitude. Reform of the Executive Board that has been undertaken so far has not impacted positively in its functionality with regard to crises such as pandemics and COVID-19 in particular. The Executive Board appears not to be acting on its "executive" role, such as providing specific guidance in a time of a crisis, in order to support the work of the organization, even during the current pandemic, with its unprecedented dimensions. In addition, the question regarding **the high level of authority of the regional governance structures** of WHO secretariat as a whole has been raised frequently as an element which makes globally-coordinated governance more complex, including its semi-autonomous political processes for the election of the Regional Directors.

WHO has highly competent and worldwide recognized leaders and experts, but the level of competence and the quality of the technical work varies across the organisation and around the world

The regional offices have proven to be important and appreciated interlocutors to ministries of health and WHO country offices. The work of WHO and its **Regional and Country offices** has been affected considerably by the pandemic. Human and financial resources had to be shifted to the response, planned activities in many other programme areas had to be delayed or cancelled, country support suffered, and many staff members had to work remotely and with an increased workload. Both levels appeared to have not been sufficiently resourced for a fast and effective response and to support national governments.

The issue of WHO's attention to non-COVID-19 related health has also been raised mainly in terms of the visibility of its critical work for resilient health systems, universal health coverage,

and healthier populations as these priorities continue to be of high relevance during the pandemic.

Despite the observed gaps and challenges, **current developments show that WHO is playing a vital role in the international health response to the COVID-19 pandemic, which is widely appreciated, especially in its convening role.** There are aspects of the work of the organisation which seem to have performed better than others, partially due to the shifting of priorities and resources due to the pandemic. But overall, the message is straightforward: **the world needs WHO and WHO needs further reforms.**

Conclusions

WHO needs to continue its transformation to deliver successfully on its wide-ranging functions.

WHO is and should be the lead health organization in the international system but it cannot do everything. It is imperative that the international preparedness and response system work together at the global, regional, and country levels as a well-defined and well-coordinated system in support of countries where different actors' comparative advantages are maximized.

In its support to national governments, WHO plays the role of convener, providing strategic direction, analysis, norms, and standards as well as technical advice to ensure countries have resilient health systems that are prepared with the required response capacities for health emergencies. In health emergencies, WHO plays the role of coordinator under the UN Resident Coordinator and as part of the UN Country Team, promoting and supporting an all-of-government response with other UN agencies, NGOs and national stakeholders.

WHO's role as the coordinator and convener needs to be further recognized and strengthened. WHO should focus on its six core functions and provide operational coordination and technical support in field operations where needed without, in most circumstances, taking on responsibility for procurement and supplies, building on the comparative strengths and capacities of other international and regional partners.

The quality and clarity of the technical advice and direction WHO provides to the world are of utmost importance. Programmes should be further strengthened and capacitated with high quality technical and practical expertise' supported by the necessary financial, organizational, and management systems.

WHO provides the platform for Member States to execute their leadership responsibility collectively as equal partners in the global health system, in a way that enables WHO to operate free from external politically or economic-based influences. The organisational financing structures, the election system for the Director-General and the Regional Directors as well as the semi-autonomous political process for the election of regional directors have implications for the political independence and integrity of decision-making during health emergencies.

WHO governance has been discussed for several years, especially the functionality of the Executive Board. The performance of the Board during COVID-19 highlighted existing weaknesses in the implementation of executive oversight and governance responsibilities of Member States, including ensuring coherence and compliance with decisions across global, regional, and national levels.

2. Methodology

For this analysis, a mixed-methods approach has been used to examine the role WHO has played for pandemic preparedness and response, the challenges and opportunities the organization has faced, as well as to understand where changes may be needed. The work consisted of desk-based literature reviews, internal (WHO) and external specialist interviews, and expert roundtables as well as panel discussions. In addition, the second meeting of the Independent Panel in October 2020 and the 4th meeting in February 2021 focused specifically on WHO-related aspects.

Three desk-based reviews were conducted to examine the suitability of WHO's mandate in leading the global pandemic response, to understand its role in the multilateral system, and to learn more about the ongoing internal debate on WHO reforms. Two technical roundtable discussions also were carried out to discuss the challenges of WHO's financing structure and possible solutions for change.

A detailed chronology and a summary paper on the "initial chronology" have been conducted and published separately that is also providing references to the work and actions by WHO. In addition, background documents on the "Impact on Essential Health Services", "Access to Essential Supplies" and "Access to Vaccines, Diagnostics, and Therapeutics", include several linkages to WHO's work in these areas, including ACT-A and the COVAX initiative. And a more in-depth analysis on specific recommendations such as community face masks and travel restrictions can be found in the background document "From Science to Policy".

Semi-structured interviews, based on seven overarching questions were carried out with more than 50 key stakeholders and country teams from a wide range of institutions, including members of the WHO secretariat, ministries of health, UN and other international organizations, donors, and non-governmental organizations. Interview guides were used for all interviews. The questions include:

1. Does WHO have the right mandate and functions for pandemic preparedness and response?
2. Does the organisation have the right structure and capacity to deliver on its mandate?
3. Is the financing of the organisation optimal and appropriate?
4. Is WHO's governance system fit-for-purpose?
5. Does the Director-General have the relevant authority to ensure that its mandate is adhered to?
6. What has been and what should be WHO's role in the international system?

7. In what way has the present political environment affected WHO to perform its tasks?

Although WHO is made up of its Member States and its Secretariat, the focus of this paper is mainly on the role of the Secretariat - those based at its headquarters (HQ), regional offices (RO), and country offices (CO) - for pandemic preparedness and response. Additionally, while the management of disease outbreaks is a core responsibility of the WHO Health Emergencies Programme (WHE), all divisions and functions at WHO are included in this review to account for the wider health and societal implications.

The main aim of this document is to provide an overview on WHO's situation before the pandemic, its activities during the pandemic, and the impact on the organization on the global and regional level (at the current moment). It also includes a discussion on certain aspects like WHO's role and mandate, functions, and the influence of the political environment.

3. WHO – background

This chapter provides an overview of WHO before the start of the COVID-19 pandemic. The sub-chapters are meant to be general introductions to assist the understanding and analysis of the following analysis and discussion.

3.1 Role and Mandate

“The objective of the World Health Organization (WHO) shall be the attainment by all peoples of the highest possible level of health”. The World Health Organization (WHO) was established in 1948 as the directing and coordinating authority on international health work within the United Nations framework. It was to provide a source of expertise for countries needing assistance in establishing high-quality health care provision as foreseen in the WHO constitution. Furthermore, the WHO bears the mandate of establishing and influencing legislation and guidelines setting both national and international baseline policies (1).

As described in WHO’s constitution (Article 28) the General Program of Work (GPW) is the highest level of direction for the organisation. WHO’s 11th GPW (2006-2015) six core functions were defined to summarize and remodel the 20 functions defined in the WHO’s constitution and have remained as the WHO core functions for GPW12 and GPW13:

1. Providing leadership on matters critical to health and engaging in partnerships where joint action is needed
2. Shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge
3. Setting norms and standards and promoting and monitoring their implementation
4. Articulating ethical and evidence-based policy options
5. Providing technical support, catalysing change, and building sustainable institutional capacity
6. Monitoring the health situation and assessing health trends

WHO has a unique mandate for setting global standards in health through various instruments such as conventions and agreements (e.g., Framework Convention on Tobacco Control) or regulations such as the International Health Regulations, which are binding to all member states (2). In addition, the World Health Assembly (WHA) can agree on non-binding recommendations such as the Global Strategy and Plan of Action on Public Health, and Innovation and Intellectual Property (3). Further core functions are setting nomenclatures (e.g., International Classification of Diseases [ICD]) and standards (e.g., Codex Alimentarius).

The 2008-09 financial crisis and the following reform process had a great impact on the role and identity of WHO and the extent to which it maintained its comparative advantage as an organization run by Member States with a broad agenda but limited resources in a competitive

environment where new players with more specialized agendas and governance structures tailored to a narrow range of interests and funders had arisen (4). This competitive environment within the fast growing and uncoordinated global health architecture, has led to discussion of long-standing concerns about WHO's core mandate, and functions and also its value systems (5).

3.2 Leadership and Governance

WHO is governed by the World Health Assembly (WHA) and the Executive Board (EB). The WHA is WHO's supreme decision-making body and meets annually. Its main functions are to determine the overall policy direction of the organization, to supervise financial policies, to review and approve the proposed programme budget, to appoint the DG, and to elect the 34 technically qualified members of the EB. EB members are responsible for preparing the WHA agenda. In addition, the EB reviews the program budget, and advises the WHA and the secretariat on constitutional and regulatory issues. It also prepares the draft General Program of Work (GPW) in which WHO's very broad range of functions are planned—from monitoring trends health, setting and promoting norms and standards, and offering knowledge and policy advice to providing technical assistance for Member States at the country level.

In addition to its headquarters in Geneva, WHO comprises six regional offices and 150 country-based field offices. This three-level organizational approach is complex and can be difficult to manage efficiently but is also seen by observers both within and outside the institution to have benefits. Regional and country offices can gain a closer grasp of ground-level situations and provide more effective coordinators for country activities. As semi-autonomous entities within a global structure, however, this means power within the organization is dispersed and sometimes inefficient. It also means that an already thinly financed organization is hard-pressed to allocate resources across its entirety.

As public health crises such as repeated Ebola outbreaks and the specter of flu outbreaks stressed the global system, WHO developed a "reform agenda" in 2011 (6). This continued work in "results-based management" focuses on narrowing WHO commitments, clarifying its role in global health governance and among other actors in international health, and enhancing its speed and agility in response.

In 2019 Director-General Tedros Adhanom Ghebreyesus led the WHO through a reorganization at its global headquarters in Geneva, appointing a new Deputy DG, shuffling top management roles, and creating a Chief Scientist post to oversee a new division engaged in coordinating and promoting research, epidemiology, and digital health, and hiring more scientists within the organization. The new division went up alongside program pillars covering universal health care and a broad range of health aspects—including access to health services, widespread infectious diseases such as malaria and TB, climate change, antimicrobial resistance, and social determinants of health—and a new emergency preparedness and response programme.

3.3 Finances

There are high expectations for WHO to provide leadership, independent evidence-based policy and technical guidance, and accurate data about potential outbreaks, as well as health trends across the world. It also is expected to provide technical support for operational work as required. This work requires WHO to perform at the highest possible level of quality, independently and with maximum integrity. As such it needs integrity, sustainability, and efficiency in its financing. Continuous, active fund-raising might not be the optimal solution. Dependence on specific donors—and, sometimes, a very limited number of donors—poses a risk to the trust in and the independence of the organisation.

The total budget approved by the WHA for the two-year period 2020-21 is USD 5.8 billion. The budget includes “base” programmes (USD 3.8 billion), emergencies and appeals (USD 1 billion), polio (USD 863 million), and so-called special programmes (USD 209 million). There are two main sources of financing: assessed contributions (AC) based on the UN scale of assessments and voluntary contributions (VC) totalling USD 960 million and USD 4.84 billion, respectively, for the present biennium, 2020-21. As of 21 September 2020, WHO had more than USD 7.4 billion available in total due to the requirements of its emergency and appeals segment, mainly related to COVID-19.

The AC budget has remained between approximately USD 850 million from 1994-2005 and approximately USD 950 million since 2018, the WHA has approved only limited increases of the AC budget at a few occasions. In contrast, the VC part of the budget has increased by 67% between 2004 and 2007 alone. Over time, the balance between AC and VC has changed dramatically (Figure 1). Fifteen partners contribute approximately, 65% of the VC with presently Germany, The Bill and Melinda Gates Foundation, USA, and UK as the four largest. These voluntary contributions are to a greater or lesser degree earmarked to programs and activities. Those earmarked voluntary contributions usually reflect the priorities of the contributors’ rather than being set by the WHA.

In 2004 the concept of Core Voluntary Contributions (CVC or unearmarked voluntary contributions) was introduced as a means to move away from the earmarking of VC, but this still only makes up about 3% of the total budget today. The AC and CVC, along with the overhead charge on the VC (Program support cost, PSC and Post occupancy charge), POC, account for all of the unearmarked resources which the WHO Director-General has the authority to potentially re-allocate. This figure is down to 39% of total WHO resources from 44% in the previous biennium.

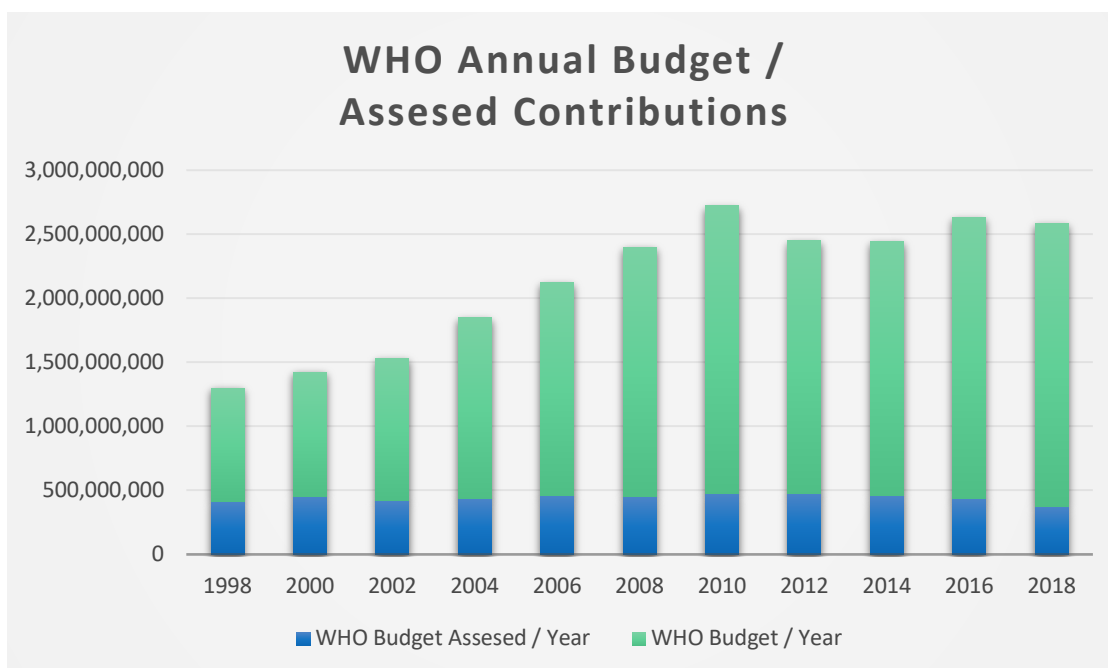


Figure 1: WHO Annual Budget (Total, Assesed contributions) 1998-2018

The way WHO is financed today is costly in terms of transaction costs (proposal writing, managing highly specified funds and small grants with short timelines, reporting to individual donors). It seriously impacts the quality of the organisation's performance and, most importantly, the way WHO is financed is a major risk to the integrity and independence of the work of the organisation. Attempts during the last decades to improve the present model have not been successful. To the contrary, over the last two years the situation has become even worse. Experts have called for financial reforms linked to improving performance and the quality of work.

While the majority of WHO's voluntary funding comes from official development assistance (ODA) its work goes far beyond development and aid. As COVID-19 further complicates the international financing picture, the space for a possible increase of ODA is shrinking, and the increasing awareness of the need for financing global public goods beyond aid. It is useful to compare this situation with the trends and work around climate financing. To the extent that global health is a global public good, the work of WHO is a global public good, and the thinking around its financing should probably be more in line with these trends.

3.4 General Programme of Work (GPW)

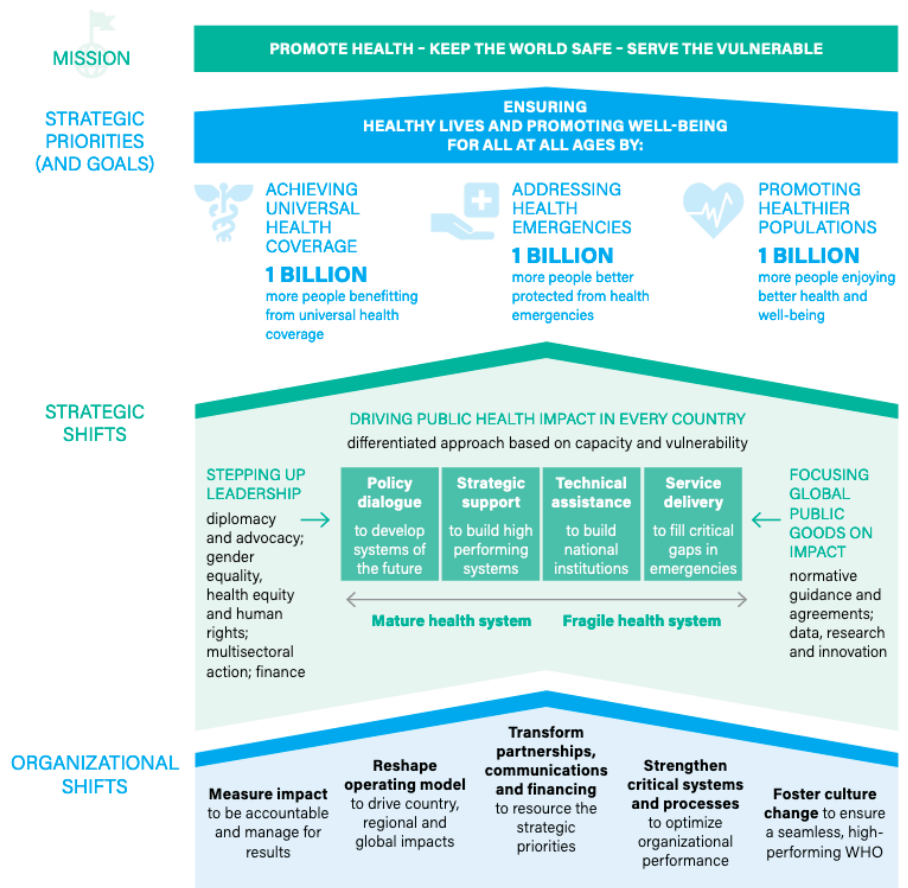
The General Programme of Work of WHO is a mission-and-goal setting strategy to adapt to and accomplish measurable impacts on human health at the country level, reflecting what the organization views as its mission according to the GPW 13: to promote health, keep the world safe, and serve the vulnerable. The programme of work's leadership priorities set the agenda for its biennial budget process.

WHO is now midway through its 13th GPW (7), which is organized around three pillars (universal health coverage, better protection from health emergencies, and for creating populations who enjoy better health and well-being), strategic shifts reflecting the organization's six core functions, and organizational shifts to support the work. (Figure 2). The programme was adopted in 2019 and is marked by a drive to step up leadership and increase impact in every country, with a focus on evidence-based work and measuring impact (8).

While understandably the focus during 2020 has been on pandemic preparedness and emergency response, WHO still continued supporting essential health services and focusing on other communicable diseases such as HIV, tuberculosis and cholera, on non-communicable diseases and immunization, as well as health workforce education, research, and health systems assessment and evaluation.

Overall, the GPW has moved substantially over the years from an information-and-policy oriented rubric with a research function towards a more active, outcome-focused set of objectives. WHO will now be extending its 13th GPW because of the pandemic, which caused setbacks in the path to reach priority targets.

Figure 2: Overview of WHO's 13th General Programme of Work (GPW) 2019-2023: Strategic priorities and shifts



3.5 WHO Emergency Programme and Pandemic Preparedness and Response

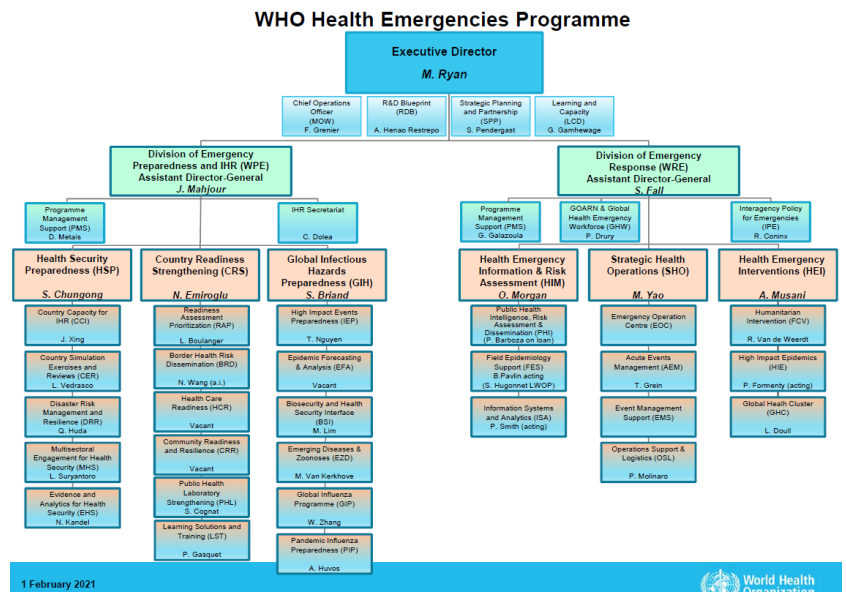
The World Health Emergencies Programme (WHE) was established in the 2009 H1N1 pandemic but accelerated in response to the dire 2014-2016 Ebola virus epidemic in West Africa. WHO had already earlier had emergency programmes of different kinds and formats.

The design, oversight, implementation plan, and financing requirements for the WHE were approved at the May 2016 WHA. It was conceived as a single programme enabling the WHO to respond more effectively across all three levels of the institution to outbreaks and emergencies (9). The WHE sought to streamline and consolidate authority, budgets, and standards to bring speed and predictability to WHO's emergency work. The programme launched in July 2016 with an overall budget of USD494 million for its first biennium and with Independent Oversight and Advisory Committee (10) for oversight and advice.

The WHE was launched with a mission to boost disease detection and risk assessment, develop standardized strategies and service packages for emergency response, strengthen WHO country office resources, expand international partnerships, and support joint appraisal of country capacities using assessment and evaluation tools under the International Health Regulations (2005).

The WHE's field operations showed success in, for example, containing a diphtheria outbreak among Rohingya refugees in Cox's Bazar, in advancing research needed for Zika preparedness, and in the wide uptake of using evaluation tools and surveys (11).

The WHE continues to have a high profile within WHO and was a central part of the 2019 reorganization (12). With the COVID-19 pandemic hitting only three years after its launch, it has yet to be seen how recent events will impact the WHE; before the pandemic hit it was still finding its feet, marking some early successes but also operating under strained operating resources and capacities. For example, recruitment of programme staff at country office level was moving slowly in 2018, according an IOAC report (13); in 2020, as the pandemic reached an early crest, the IOAC recommended that Member States and the WHO secretariat review their



own IHR core capacities, as well as existing tools and frameworks for national and international preparedness, and consider whether they need updating (14).

In response to COVID-19 WHO published a comprehensive Strategic Preparedness and Response Plan (SPRP) on February 4, 2020, outlining the necessary public health measures for countries and the international community to prepare for and respond to the outbreak. (38) (Table 1). This global SPRP was updated in April and November 2020 as well as in February 2021 and complemented by several interim guidance publications for critical preparedness, readiness, and response actions for COVID-19.

WHO Strategic Preparedness and Response Plan (SPRP)			
The overall goal of the strategic preparedness and response plan is to stop further transmission of 2019-nCoV within China and to other countries, and to mitigate the impact of the outbreak in all countries.			
Strategic objectives	Limit human-to-human transmission, including reducing secondary infections among close contacts and healthcare workers, preventing transmission amplification events, and preventing further international spread from China	Identify, isolate, and care for patients early, including providing optimized care for infected patients	Identify and reduce transmission from the animal source
	Address crucial unknowns regarding clinical severity extent of transmission and infection, treatment options, and accelerate the development of diagnostics, therapeutics, and vaccines;	Communicate critical risk and event information to all communities, and counter misinformation	Minimize social and economic impact through multisectoral partnerships
Actions	Rapidly establishing international coordination to deliver strategic, technical, and operational support	Scaling up country preparedness and response operations	Accelerating priority research and innovation to support a clear and transparent global process to set research and innovation priorities

In addition, a large number of technical guidance documents and tools were provided by WHO and its Regional Offices from mid-January 2020 onwards (Figure 3). WHO's regional offices also published regional plans which were aligned with the global SPRP and adapted for a more regional approach.

3.6 The International Health Regulations (2005)

The International Health Regulations (2005) (IHR) are a legally binding international agreement among 196 States Parties, including all WHO Member States, to work together for global health security. Through the IHR, countries have agreed to build their capacities to detect, assess, and report public health events, especially when international travel and transport might be affected (WHO). The responsibility for implementing the IHR rests upon national governments, which need to designate a National IHR Focal Point, and on WHO, which plays the coordinating role in IHR implementation and, together with its partners, helps countries to build capacities.

A number of assessment and institutional mechanisms have been conducted in order to ensure the implementation of the IHR including State Parties Self-Assessment Annual Reporting (SPAR) validated against voluntary Joint External Evaluations (JEE), After Action Reviews, and simulation exercises as well as a five-year global strategic plan for public health preparedness and response (PHPR). Despite these activities and tools there has been only limited preparedness capacity strengthening in many countries (15). In addition, studies have shown that IHR monitoring and evaluation has not been sufficient and that for many (high-income) countries, higher scores have shown no correlation with lower COVID-19 death rates (16). While binding for Member States, the IHR do not provide the WHO Secretariat with any authority to impose sanctions on countries for non-compliance (14).

The IHR Emergency Committee (EC) is made up of international experts who provide technical advice to the WHO Director-General in the context of a Public Health Emergency of International Concern (PHEIC) and suggest Temporary Recommendations that should be taken by both affected countries and countries at risk. Selection of IHR EC members by the DG is based primarily on their technical ability and experience in the relevant fields of expertise. Possible delays in the declaration of the PHEIC, its binary structure, a lack of transparency in decision-making processes, and the evidence base for the recommendations made, continue to be under discussions (17) (18) (19).

According to various expert commissions, including all four IHR Review Committees since 2016, several serious institutional challenges still exist. Among them: national core capacities need to be built up and strengthened, financially supported by international actors and donors; national action plans need to be developed and national IHR focal points nominated to ensure rapid communication and coordination; reporting, monitoring, and evaluation processes need to be streamlined and strengthened; external and peer-review assessments appear to be necessary; notification and alert systems need to be revised, and; a transparent, and a politically protected Standing IHR Emergency Committee should be established. One specific issue that stands out is the rejection by Member States of the recommendation by the EC to have the Joint External Evaluations (JEE) as a mandatory process.

In an interim report to the WHO Executive Board in January 2021, the IHR Review Committee emphasized the insufficient high-level political support and resources for the implementation of the IHR at both the national and international levels. In addition, the lack of robust compliance, evaluation, and accountability mechanisms as well as of incentives for adequate preparedness and cooperation under the IHR were particularly emphasized (20). Previous panels and commissions have also repeatedly stated the need for strengthening the authority of national focal points and for an ongoing independent and/or peer-reviewed monitoring and evaluation mechanism to improve reporting and support the implementation of the IHR (21) (22).

Although these suggestions have been considered and discussed in WHO governing bodies throughout the past years, many have not yet been implemented. Given that the last revisions to the IHR took almost a decade of difficult negotiations, Member States appear reluctant to open the debate again, even though warnings about possible pandemics have now become reality. In the meantime, WHO has provided countries with technical assistance for improving their IHR core capacities and has been leading monitoring and evaluation of these through, e.g., JEEs. With many assessment results showing little relation to the success of a country’s COVID-19 response, there have been multiple calls for revamping preparedness monitoring.

3.7 The Transformation Agenda

From the time DG Tedros took office in 2017, WHO has been working on its Transformation Agenda (Table 1). The plan aims to align the strategic objectives at global, regional, and especially at the country level of the organization (23).

Strategic objectives		
Fully focused and aligned for impact	Enabling the full potential of the organization	Leveraging the global community
Major workstreams		
Impact-focused, data-driven strategy	“Best-in-class” processes	New approach to partnerships
Collaborative and results-focused culture	Aligned, 3-level operating model	Predictable and sustainable financing
Motivated and fit-for-purpose workforce		

Table 1: WHO Transformation Agenda, strategic objectives, and major workstreams

According to WHO’s 2020 progress report on its transformation, some of the changes made have already shown their significance during the COVID-19 pandemic. It refers specifically to the new post of Chief Scientist, and also to several business, partnership, and external relations functions, which have proven to be essential as they could be used and scaled up right from the beginning of the pandemic. Several of the transformation initiatives were critical to WHO’s business continuity, for example, for shifting to remote working and for adopting innovative

communications approaches, ensuring the continuity of its support to Member States despite substantial logistical and operational constraints (24).

WHO's secretariat reported on the transformation to the Executive Board's 148th session in January 2021, emphasizing its importance as the COVID-19 pandemic had shown the need for WHO to be fully able to fulfil its mandate, its various roles and functions and the priorities agreed with its Member States. Apart from unprecedented pandemic preparedness and response activities WHO had to focus on non-COVID-19-related country support to maintain essential services and programmes as well, as health services have substantively been directly and indirectly affected in most member states. 2020 has shown that additional work on the transformation agenda will be needed, and some areas revisited, refined and reprioritized (24). WHO's Regional offices presented reports on their progress in the transformation agenda to the respective WHO Regional Committee meetings:

AFRO	The Transformation Agenda of the WHO Secretariat in the Africa Region: Phase 2, 2017	Link
EMRO	Transforming for enhanced country impact: progress in the Eastern Mediterranean Region, October 2020	Link
EURO	Transformation in the WHO European Region, September 2020	Link
PAHO	<i>PAHO has contributed to the WHO's global report on WHO transformation, but has not been involved in all aspects of the transformation process as it has conducted its own major regional reform and transformation efforts in recent years. These are aligned with WHO's Transformation framework and PAHO's strategic plan 2020-2025 is fully aligned with WHO's work on the GPW13 and the SDGs</i>	Link
SEARO	WHO Transformation Agenda, SEA/RC73/11, August 2020	Link
WPRO	Coordination of the work of the World Health Assembly, the Executive Board and the regional committee, WPR/RC/70/9, September 2019	Link

Priorities for the ongoing transformation are to:

- set in place new accountable ways of working
- implement processes to support this
- build a motivated workforce, equipped and capable of carrying out its role
- roll out measurement tools
- transform WHO's financing

3.8 The role of WHO within the international system

Over the last two decades, global health has gained unprecedented traction over the last two decades within the global political system, resulting in a vast expansion of the global health realm. Framing the HIV/AIDS agenda in terms of not just health or development but also national and international security in 2000 signified a turning point: many saw an opportunity to bring health from the margins of political attention to the centre stage. Over years the global health policy domain has slowly moved from an international governmental-focused approach to a plurality of non-governmental organisations (NGOs), private philanthropists, activist groups, bi- and multilateral organisations, public-private partnerships (PPPs), transnational corporations, and other private sector entities, creating a complex global network of ‘hyper-collective action’ (25).

These transformations have occurred within and reflect the wider challenges the United Nations (UN) system is facing. The UN system faces continuous scrutiny concerning its added value. Within this system, few institutions have been subject to such consistent calls for reform as the WHO,. While in the early days its global health funding and partnership models were hailed as innovative and seen as future role models within global governance and an example for other UN institutions, chronic underfunding of WHO has instead given rise to a market-driven global health environment: potential donors engage in “forum shopping” and create other competing initiatives (26). As a result, critical voices are calling for reform of the UN system and, within it, the global health governance architecture (27).

During the same period, the WHO mission has widened from a medically oriented focus to consideration of socio-economic determinants of health and the inter-relationship of health and other domains such as the environment, education, and financing. This occurred even as resources were spread thinly across the growing repertoire, opening the health space for other actors, initially UNICEF, then the World Bank, and global public-private partnerships (28).

Health has not remained solely under the purview of health actors, either, as it plays a role in development and other global issues. The World Bank, for example, emphasises health system strengthening and financing as part of its development agenda. Likewise, the World Trade Organisation’s role has expanded as its trade regime raises issues for access to drugs and health services, as well as for health considerations to be taken into account in trade decision-making (for example non-communicable diseases and major risk factors such as tobacco, food safety, and unhealthy diets).

Global health scholars describe the global health regime as being highly fragmented, and lacking co-ordination and an overarching framework, which results in parallel structures and duplication of efforts. Not only is WHO’s role in global health subject to change, but the international system is also changing around it. The COVID-19 pandemic has clearly shown the close

interconnectedness between sectors and the dramatic consequences a health issue can have on the global economy.

While the WHO ought to co-ordinate global health efforts, provide guidance, and function as an overarching focal institution, it has not been perceived as the sole co-ordinating body for decades; observers assert that there is “*no architecture of global health*” (29) (30). Instead, global health resembles a networked structure of diverse powerful actors bound by a web of treaties and so-called ‘soft’ law instruments that strongly affect global health, many of which have arisen under the auspices of the WHO (31). The formation of new global health institutions not only crowds the space in which WHO operates and the financing from which it draws, but such institutions were established principally to fulfil a need which the WHO was perceived to be unable to provide.

4. Overarching Institutional Questions

The Panel identified 7 overarching institutional questions and reviewed those through literature reviews, structured interviews with stakeholders and sub-group panel meetings.

4.1 Does WHO have the right mandate and functions for pandemic preparedness and response?

Determining whether WHO has the right mandate and functions for pandemic preparedness and response—both formally and in practice—must take into account both the direct and indirect health impacts of pandemics and other global public health emergencies.

Given the nature of the definition of health and the overall objective in the WHO constitution it is a major challenge to try to restrict and prioritize the scope of WHO's work in terms of substance. The present pandemic shows that it is not enough for WHO to focus on emergency and disease control aspects, but also to ensure that non-COVID-19 essential health services are maintained and that crucial work on health promotion and prevention is not neglected during the pandemic.

While the scope of work of WHO is necessarily as wide as that of health and wellbeing, that does not mean it needs to do everything itself. WHO is a key player in the international system, but not the only one. This leads to the important question: what are and what should be the key functions for the WHO in general and in the area of pandemic preparedness and response specifically? And what functions might be better placed with other organizations?

As described in WHO's constitution (Article 28) the General Program of Work (GPW) is the highest level of direction for the organisation. WHO's 11th GPW (2006-2015) **six core functions** were defined to summarize and remodel the 20 functions defined in the WHO's constitution and have remained as the WHO core functions for GPW12 and GPW13:

1. Providing leadership on matters critical to health and engaging in partnerships where joint action is needed
 2. Shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge
 3. Setting norms and standards and promoting and monitoring their implementation
 4. Articulating ethical and evidence-based policy options
 5. Providing technical support, catalysing change, and building sustainable institutional capacity
 6. Monitoring the health situation and assessing health trends

These six core functions are widely accepted today as the general framework for the organization's work, but some experts view them as too broad and vague.

Whether *normative and operational functions* are clearly distinct, exist on a continuum, or that one should be preferred over the other, has been a long-standing debate and discussion. This is possibly because of a lack of common de facto understanding of what “operational” means. There is a general agreement among experts interviewed by the Independent Panel that WHO should not provide e.g., health staff for clinical work. But to what extent should WHO fill gaps in terms of coordination or e.g., technical capacity for surveillance if governments’ capacity is not enough? What is the experience of being the “agency of last resort” and, in the current pandemic, procuring and distributing medical supplies such as test kits and PPEs?

Lessons from previous outbreaks and the current pandemic show that there is a need for an international operational surge capacity available to be deployed to settings where national capacity is not sufficient. The surge capacity needs to include coordination, technical support (e.g., epidemiologists) but potentially also logistical support and access to essential supplies. The questions are whether WHO needs to deliver on all those functions or if other international partners are better placed to take on some of the tasks, or whether this operational arm of WHO needs to be further strengthened within the Organisation and better coordinated with other actors or whether this operational arm of WHO needs to be separated from the rest of the organisation.

These and additional aspects were also emphasized in the interviews conducted by the Independent Panel. Some of these key aspects are listed below.

Role and Mandate	<ul style="list-style-type: none"> • <i>WHO should be the champion representing its Member States</i> • <i>WHO should concentrate on roles it is best able to play</i> • <i>WHO cannot support Member States in all areas, therefore, partnerships are critical</i>
Functions	<p><i>The overwhelming message was that WHO’s main functions should be</i></p> <ol style="list-style-type: none"> <i>1) Leadership, coordination, and convening,</i> <i>2) Setting norms and standards, issuing evidence-based and timely guidance, setting the health research agenda, guiding member states on what they can trust or not and</i> <i>3) Providing technical assistance and expertise</i>
Preparedness	<ul style="list-style-type: none"> • <i>WHO should lead on and support independent reviews of preparedness, and perhaps simulation exercises of national response</i> • <i>Technical support should be tailor-made to the specific needs of countries and the availability of national resources</i> • <i>WHO should support institutional capacity building.</i>
Surveillance and Alert	<ul style="list-style-type: none"> • <i>WHO should provide an early alert system to sound the alarm when there is an emerging infection</i>

	<ul style="list-style-type: none"> • <i>Some said that WHO must conduct its investigations much earlier in the pandemic and this must be binding to countries</i>
Response	<ul style="list-style-type: none"> • <i>Support for country implementation might be better placed with other (UN) organizations</i> • <i>WHO has an important role to support a whole-of-government and whole-of-society response and for coordination across various actors and sectors. Resilient health systems and sustainable development require that health is not seen in isolation.</i>
Procurement and supplies	<ul style="list-style-type: none"> • <i>WHO should not manage procurement and distribution of supplies as UNICEF, WEF, and UNFPA have much more experience in this area. WHO should work closely with these agencies.</i> • <i>WHO should only in very special emergency situations provide supplies directly. Yet others are saying, WHO is able to provide procurement and distribution of commodities, as demonstrated by the Dubai hub for procurement and supplies operations. It can be successful, if it is well designed.</i> • <i>WHO should not do day-to-day coordination and logistical operations, leaving that role to OCHA</i>

In summary:

- Focus WHO's mandate on normative, policy, and technical guidance, including supporting countries and regions to build capacity for pandemic preparedness and response and for resilient and equitable health systems.
- Empower WHO to take a leading, convening, and coordinating role in operational aspects of an emergency response to a pandemic, without, in most circumstances, taking on responsibility for procurement and supplies, while also ensuring other key functions of WHO do not suffer including providing technical advice and support in operational settings.

4.2 Does the organization have the right structure and capacity to deliver on its mandate?

This question relates to whether WHO has the right structures, ways of working and, possibly most importantly, the right and appropriate competencies for work relating to pandemic preparedness and response.

WHO has a fairly complicated organisational structure and is described as “*working on three levels*”: country offices, regional offices and headquarters. The regional offices are somewhat independent, and the country offices report to the regional offices. There have been several attempts to better define the different roles and delegated authority as well as to align the programme of work of the three levels of the organisation. During the COVID-19 pandemic, health security committee calls between the HQ and Regional leadership groups initially took place on a daily, later on a weekly basis. In addition, non-COVID related issues are also being discussed regularly within the senior management team. Furthermore, a number of steering committees, e.g., on UHC are working across all levels of the organisation and conferences are being held with the heads of the WHO Country Offices to discuss e.g., vaccines deployment.

WHO relies on skills and competences among its staff. Its main task is to provide top-notch advice based on evidence and international best practices. The level of competence varies across the organisation, based not only on individual skills but whether the personnel profile matches need in a specific setting. The mismatch can be especially noticeable at the country level where some say WHO’s human resources approach relies too much on pressures from governments and not on merit. Some experts interviewed by the Independent Panel said it would be “*very difficult to control an organization, if you don’t control the money, and you can’t get rid of people who are not any good*” and the “*DG’s ability to do anything about this is limited, partly because those people are put there by influential member states*”. In addition, looking at the Global Fund and Gavi was suggested. Their donors cannot earmark money and therefore do not have as much influence on staffing decisions. Some interviewees highlighted the differences between the six WHO regions, the differences in terms of the Member States, their burden of diseases and their level of preparedness among other aspects. The close cooperation between the EMRO and EURO offices in Syria to support migrants and refugees was well appreciated. Dynamics in each region appear to be different and the high level of independence of the Regional Offices has repeatedly been criticized, describing, for example, PAHO as having “*its own centre of power*”, doing “*what it wants to do anyway, despite the HQ*”. Ensuring more regional legitimacy would therefore be necessary.

The direct communication between the HQ and the country level still could be improved, according to some of the experts interviewed. This could also lead to a growth of critical trust between Member States and the organization as their requests and demands for support could be better handled.

In guidance development, different dynamics seem to exist, as the HQ level is concentrating global expertise for the development of technical guidance, while some aspects could be better dealt with more efficiently on the regional level, including local experts. This also could lead to making policies more appropriate and more actionable for Member States.

WHO ranks third of UN entities (after UNDP and UNICEF) in terms of field presence with a presence in more than 149 of the 194 UN member countries. The number of staff in a country office ranges from 10 to 1000. WHO headquarters in Geneva is the primary location of about 2500 staff members.

The importance of a well-functioning WHO Country Office, not only in times of crisis, was emphasized by most of the experts interviewed by the Independent Panel. Offices should be fit-for-purpose and regularly adapting the programme of work to the changing needs of countries. Adequate resources should be redistributed from HQ to the country level to strengthen WHO's work on the ground as advisors providing technical guidance to the national governments. In addition, some country offices do not seem to have the human resources and adequate qualifications to implement technical activities in specific areas, e.g., sexual and reproductive health, and these areas should therefore be covered by other UN agencies and organizations instead. In some countries a lack of capacity in relation to the country situation and the level of operationalization has been observed and it was stated by one interviewee that *"WHO country offices sometimes do not have a clear role to play"*.

The quality of WHO's performance in country varies among countries and is dependent on the qualification and performance of the head of the country office (WR), who represents the entire organization on the national level and who can often be a significant interlocutor with the Ministry of Health. A better selection of WR's, improved performance management, and an increased level of accountability are therefore being suggested. In addition, more direct and frequent interaction between the HQ and the country level of WHO has been recommended by a number of persons consulted. The Independent Oversight and Advisory Committee for the WHO Emergency Programme (IOAC) has stated in its latest report that there is *"a general perception among staff that coordination across the three levels of WHO has significantly improved"*. But the IOAC also observed resistance to change within the organizational culture and administrative system of the organization (37).

In AFRO a process called *"functional reviews"* of WHO country presence has generated some interesting insights. The EMRO region is following with a similar exercise, as have the other regions in one way or the other. The purpose is to review whether the strategic direction and priorities for the country office are in line with the specific country's needs; if the office's organisation and functions are appropriate; and if the competence and staffing matches. Budgeting and resources are also part of those processes, as is improving internal management.

In summary:

- Resource and equip WHO Country Offices sufficiently to respond to technical requests from national governments to support pandemic preparedness and response, including support to build resilient equitable and accessible health systems, UHC and healthier populations.
- Prioritize the quality and performance of staff at each WHO level, and de-politicize recruitment (especially at senior levels) by adhering to criteria of merit and relevant competencies.

4.3 Is the financing of the organisation optimal and appropriate?

WHO financing has high transaction costs. This seriously impacts the quality of the organisation's performance and, most importantly, the way WHO is financed is a major risk to the integrity and independence of the work of the organisation. Despite attempts to fix the present system, the situation has become even worse over the last two years.

There are high expectations for WHO to provide leadership, independent evidence-based policy and technical guidance, accurate data about potential outbreaks, as well as the trends of the health situation across the world. Those functions are statutory and normative in nature, but the expectation is also that WHO shall provide technical support for operational work as required. The nature of the functions has implications for the way WHO needs to be financed.

This work requires WHO to perform at the highest possible level of quality, independently and with maximum integrity. As such it needs integrity, sustainability and efficiency in its financing. Reaching out and "*begging*" for resources and fund-raising is not an optimal solution.

Dependence on specific donors—and, sometimes, a very limited number of donors—poses a risk to the trust in and the independence of the organisation. The transaction costs associated with the present ways of financing the work of WHO are huge.

The fact that the majority of WHO's voluntary funding comes from official development assistance (ODA) is also a constraint on the role of the organisation, as its work goes beyond development and aid. It is useful to compare this situation with the trends and work around climate financing. The work of WHO in advancing global public health can be considered a Global Public Good, and the thinking around its financing should be more in line with these trends.

The overall trends in international financing are worrying, especially as the COVID-19 pandemic has already had severe impacts on the economies of governments across the world. IMF estimates needs of trillions of USD, but only billions have been disbursed so far. Domestic costs are increasing, the space for a possible increase of ODA is shrinking, and there are only little discussions about how to finance global public goods beyond aid.

While the work of WHO requires a different financing strategy, the question is which method would best enable its ability to deliver on its work.

It is interesting to compare the financing of WHO with multilateral financing at large: the Bretton Woods Institutions (The World Bank, The International Monetary Fund etc.), the International Thematic Funds (Gavi, the Global Fund, GFF) and the rest of the UN system.

- The **Bretton Woods institutions** are financially governed as corporations; the boards of governance negotiate the strategic plan jointly with the funds needed to implement it. The negotiations culminate with the adoption of a strategic plan along with pledges for its implementation at replenishment meetings. The level of funds raised at the replenishment meetings activate specific scenarios for implementation of the strategic plan. As any corporation, shareholders obtain shares in exchange for a larger voice on the board of governance. All funds are provided un-earmarked against an agreed strategy and budget.
- The **International thematic funds** (Health and Climate) have taken inspiration from the Bretton Woods Institutions. As for the UN Development System, the boards of thematic funds negotiate and adopt the strategic plan. Resource mobilization, however, is done through replenishment meetings where partners pledge their contributions for the coming strategic period. The thematic funds have borrowed the term replenishment even though they are not banks providing loans; this has enabled them to position themselves closer to the ministries of finance. Although not as formal as with shares, a larger contribution gives a larger voice on the board. All funds are provided un-earmarked against an agreed strategy and budget.
- The **UN Development System (UNDS)** is based on reforms initiated by the Secretary General in what is called the **Funding Compact**. The Funding Compact aims to gain further pledges of qualitative funding from partners in exchange for a more effective and transparent UNDS.

The International Financial Institution's (IFI) and thematic funds appear to have the most successful funding models right now. The challenge is to balance "donor" or major financier buy-in with the ownership of all governments and implementers. Taking responsibility and ownership for strategic priorities needs also to go hand in hand with taking responsibility for the financing.

These different models for financing the work of multilateral organizations are useful as points of reference for discussing the new and more effective ways of financing WHO:

1. Negotiated replenishments

Used mainly by the IFIs today. Negotiated every three years, consisting of a package of strategic priorities, a matrix with actions to be taken, and a resource envelope. Board members have

influence according to their shares (financial contributions). This model is working and has proven to be effective. The weakness of this would be—from a WHO perspective—that not all Member States would have the same voice, as they would be weighted according to their respective financial contribution.

II. Structured funding dialogues

Holding structured funding dialogues (SFDs) is an approach that addresses needs for improving the alignment of funding against budgets and is used by some UN agencies, including WHO. The dialogues are non-binding and informal. The UN Funding Compact launched by the UN Secretary General provides the broader framework for the SFDs. The experience thus far is less convincing in terms of actual desired impact.

III. Organized pledging

A third model is an organized pledging process that supports an already agreed strategy and desired budget. The best examples are the thematic funds for health (Gavi and GFATM) and climate (the Green Fund and the Global Environment Facility). The resources provided are all un-earmarked. Governance structures for these entities provide stronger voices for implementors and civil society compared to the IFIs. Overall, this model has been successful in terms of raising increasing amounts of funds.

IV. Constant fund-raising

The model used by most UN entities and by many civil society organizations. Often a resource mobilization strategy is in place with dedicated resources for donor relations; it is meant to manage proposals, reporting, and engagements. This model can be successful when there is a strong brand and case for raising the resources but is always problematic as it delinks ownership for setting strategic priorities for the organization from its financing. The transaction costs are also substantive.

The most reasonable and rational option for WHO would be fully financing the work of the organisation through a member fee, the so-called assessed contributions. This would be in line with the WHO as a statutory, intergovernmental body, being fully financed by its members.

An example of financing a joint global common interest in such a way is with UN Peacekeeping Operations (approx. USD 7 billion per year). The UN Peacekeeping Operations are seen as a critical dimension and commitment to global security and are financed in total with un-earmarked resources based on the UN scale of assessment. Another example is NATO.

In a global perspective, the WHO's budget is relatively small--about ¼ of the UN budget spent on Peacekeeping Operations; ½ of the budget of GFATM; equal to a medium-sized US hospital; or 6 cents per person per year globally.

In summary.

There are *two potential options* for more substantive change in the present situation, and both require a fundamental change to the way WHO is financed today:

1. The work of the organisation to be fully financed through a member fee, the assessed contributions. This would reflect WHO's standing as a statutory, intergovernmental body which should be fully financed by its owners.
2. The work of the organisation to be fully financed through a combination of substantively increased member fees and full unearmarked voluntary contributions
 - a. The organisation accepts only unearmarked resources for the base/core budget
 - b. The strategy, budget, and plan for financing is approved by the WHA and a distinction is made between the financing of base/core program (today approx. USD 1.5 billion per year) and specific resources for the polio program, emergency appeals, and the special programs (approx. USD 1 billion per year)
 - c. The major part of the base/core budget - 2/3 – to be financed through Assessed Contributions equal to a doubling of the present level.
 - d. The additional sources – 1/3 – are mobilised through a replenishment process similar to the one in place for the GFATM and Gavi today (only un-earmarked)

This approach would imply some partners who have been making substantive contributions as core volunteers (CV) would no longer have the opportunity to have separate negotiations directing where financial resources should be used (earmarking). But there would be full transparency around the strategy and budget so there should be no question about what WHO should do. The organisation would also need to be fully accountable in terms of the performance of all parts of its work. Those options should also carry the positive attribute of linking governance to performance and financing.

In total the financial contributions from major government donors might not need to change, but rather their national budget lines. The big public donors might have to shift their present funding from voluntary contributions to assessed contributions. This means shifting budget line items at home, but not necessarily increasing total funding. This may sound radical, but it is the situation already in place as described above for the International Financing Institutions, GFATM, and Gavi.

While countries thus far have not been open to this kind of change, with the present global crisis and the critical role of WHO, the time is right for a necessary shift in financing. The critical role of WHO in making the world healthier and safer is a joint interest and responsibility for all governments across the world, in other words a paradigmatic Global Public Good.

Reforming WHO financing would need to go hand in hand with clarity about the organisation's mandate and main functions as well as an agenda for how to improve the quality and relevance

of its work across the world. The transformation agenda is as yet in its early stages and it is clear there is still some way to go to generate consistent improvement of the quality of work across the organization to a sufficient degree. To improve performance, a package of managerial reforms is required. A possibility might be to link WHO financing changes to incremental organisational change as part of a 10-year investment plan and reform package across the organization.

4.4 Is governance system fit for purpose?

The nature of the Executive Board meetings has changed considerably over time. Starting from a board of persons appointed in their individual capacity (mainly Director Generals, Permanent Secretaries, or Chief Medical Officers from Member States), the body moved to board members representing their governments as a whole. More recently it also provides opportunity for all Member States to speak (not only EB members) and, if time permits, Non-State Actors in official relations with WHO are allowed to present statements. As a result, EB meetings are now more like “mini-assemblies”, and both EB members and non-EB members mainly read prepared statements. There is less of collective interaction and decision-making at the table and negotiations related to decisions and resolutions mainly take place outside of the EB room.

These developments and challenges are constantly being discussed. While some experts are fine with the current situation and believe that the increased transparency (through, e.g., live webstreams) and the inclusion of Non-EB Member States and Non-State Actors has improved the level of diversity of voices, others believe that the board is dysfunctional due to its size and inclusiveness, which appears to be much greater than in many other intergovernmental organizations. Over the years the governing bodies have initiated several processes aimed at making these structures more effective. Some persons interviewed by the Independent panel believe that the EB “*does not operate as a board*” and that more interactive discussions would lead to more substantive results, especially if board meetings were well prepared by both the Secretariat and the participating Member States.

The role of WHO’s global governing bodies in the COVID-19 pandemic so far

The Executive Board held its scheduled meeting February 4-8, 2020, in which the DG reported that he had declared a Public Health Emergency of International Concern over the outbreak of a novel coronavirus infection with more than 17.000 detected cases and more than 360 deaths just 4 days earlier.

On 11 March 2020, following the alarming global spread of SARS-CoV-2, WHO characterized COVID-19 as a “pandemic” (*which has no further formal implications*). With disastrous impacts of the pandemic in many areas worldwide, directly or indirectly affecting the majority of the global population, and with WHO being one of the key actors within the global response, the governing bodies convened their scheduled meetings with some adjustments. In light of the

COVID-19 pandemic the 73rd WHA was held virtually and as a reduced meeting on May 18-19, 2020, focusing on the pandemic. In the first part of the WHA73 in May the WHA73.1 resolution on “Covid-19 response” was adopted by the Member States calling for *“the intensification of cooperation and collaboration at all levels in order to contain and control the COVID-19 pandemic and mitigate its impact and “in the spirit of unity and solidarity”* and acknowledging *“the key leadership role of WHO and the fundamental role of the United Nations system in catalysing and coordinating the comprehensive global response to the COVID-19 pandemic, and the central efforts of Member States therein”* (57).

Following an unofficial request of the European members of the Executive Board in July, a special session of the EB was initiated by the DG and held on October 5-6, 2020. During this session the EB members and representatives of other Member States discussed the DG’s interim report in the implementation of resolution WHA73.1 (2020) on the COVID-19 response of WHO (58). In its regular session in January 2021 the EB decided to call for the development of a resolution, with full participation of WHO Member States, for consideration by the 74th World Health Assembly in May 2021, on strengthening WHO’s health emergency preparedness and response capacities (59) .

Looking back, some EB member believe, that the *“nine months between the PHEIC and the EB special session were too long”*. More transparency and integration into decision-making processes would certainly be beneficial as many of the WHO initiatives and ideas, such as the Biohub, technology exchanges or the establishment of a One Health Council, were made outside of the governing bodies discussion forums. Others were concerned about the lack of engagement of the EB during the pandemic so far.

Experts interviewed by the Independent Panel felt that the division of the WHA into split sessions was helpful and that this might also become an option for the future as previous assemblies often had too many agenda points. The quality of discussions and negotiations could certainly benefit from a separation. This would especially be helpful for smaller Member States with fewer human and financial resources.

Overall, both the WHA and the EB would actually provide *“excellent platforms to adopt health strategies”*, but existing, very formal procedures of the governing bodies would need to be revisited to ensure *“value for time and money invested in such meetings”*.

Another suggestion would be to appoint a standing committee of the EB on emergencies, with members ready to meet within a 24-hour period, to be briefed by and to support the Secretariat in emergency situations. As Member States have also formed new open working groups on WHO reforms and financing, showing their commitment and constructive engagement, a special group for emergencies would not only be appropriate during a pandemic but could be helpful for the work of WHO in many ways.

Alternatively, the EB could be split into two groups, one focusing on the technical/normative functions and one the political functions but ensuring the collaboration in areas of overlap. Some national public health authorities such as the UK National Institute for Health and Clinical Excellence (NICE) provide “good examples of organizations with independent technical groups that have well-defined mandates, independence, and legal protections from political actors resulting in efficient and high-quality, scientific work” (60).

The role of WHO’s regional governance bodies during the pandemic so far

The annual Regional Committee meetings in the six regions were held virtually and some with a reduced number of agenda items due to an intense workload of both national governments and WHO offices caused by the pandemic. Key governance meetings held in 2020 in the six WHO regions are listed in the table below.

WHO RO	Regional governance meetings	Dates	Comments
AFRO	74 th Session of Regional Committee for Africa	25 August 2020 & resumed on 24 November 2020 (Link)	Special events on the COVID-19 response in the region took place on both dates (Link)
EMRO	67 th Session of the Regional Committee for the Eastern Mediterranean	12-13 October 2020 (Link)	
EURO	70 th Session of the Regional Committee for Europe	14-15 September 2020 (Link)	
EURO	28 th Standing Committee of the RC for Europe 2020-2021	15 September 2020 & 18 November 2020 (Link)	
PAHO	Special Session of the Executive Committee	29 May 2020	Financial situation and adjustments to strategic priorities
PAHO	166 th Session of the Executive Committee	22-23 June 2020 (Link)	
PAHO	72 nd Session of the Regional Committee of WHO for the Americas / 58 th Directing Council	28-29 September 2020 (Link)	The Council meets once a year in those years when the Conference does not meet
PAHO	167 th Session of the Executive Committee	30 September 2020 (Link)	
PAHO	Special Session of the Regional Committee of WHO for the Americas / Special Session of the Directing Council	10 December 2020 (Link)	Update on the COVID-19 Pandemic, COVAX, Preparedness, and Equitable Access to COVID-19 Vaccines

SEARO	73 rd Regional Committee Meeting for the South-East Asia Region	9-10 September 2020 (Link)	
WPRO	71 st Regional Committee Meeting for the Western Pacific Region	6-9 October 2020 (Link)	

The Regional committees have value in terms of providing Member States with a forum for political discussions closer to the home country. However, if regional and global perspectives are in conflict, this can create an unhealthy tension in the organisation at large. There are also some perceptions that relatively new regional structures are in competition with WHO, e.g EU/ECDC and AU/African CDC, in regard to certain functions.

Stakeholders interviewed by the Independent Panel were of the opinion that some of the Regional Committees would be more effective, innovative, and consultative than the governing body meetings on the global level.

Others were of the opinion that even on the regional level governing bodies were still not fit-for-purpose. While regional processes are being seen as more productive, for some experts it does not seem to be clear how the regional discussions and decisions actually feed into those on the global level of WHO. The regional committees appear to be useful for *“anchoring and positioning”* the work of WHO with its member states. Issues were also raised about the *“federal”* nature of the organisation, which provides *“local”* ownership but at the same time weakens its global and central authority. Hence, a better alignment of programmes and processes among all three levels is of great importance.

In summary:

- WHO has a complex and not fully efficient governance structure, and it appears not to be fit for a crisis of the present magnitude. Attempts have been made to reform especially the Executive Board but without real success. The EB is a forum for reading statements rather than for strategic discussions and proper governance. It is not acting on its *“executive”* role in order to support the work of the organization, even during the current pandemic, which is of an unprecedented dimension.
- Potentially the Bureau of the EB could play a more active role similar to the Standing Committee of the Regional Committee in EURO and the EB would benefit from investing in changing its modus operandi and of being more flexible and engaged.
- The question regarding the high-level of authority of the regional governance structures of WHO has frequently been raised and several attempts to change this have not been successful. Hence, it might be better to improve the existing governance system, e.g., by limiting the leadership positions to only one (7-year)-term, protecting them from political influence by the Member States. In addition, if the option would be that the WHO DG would be responsible for the recruitment of the RDs and/or the heads of WHO Country offices, the appointment might be more based on competencies and objectives, rather than on political merit.

4.5 Does the Director-General have the relevant authority to ensure WHO's mandate, especially during a health emergency?

An important aspect of the functions of WHO as an international agency, especially during a health emergency situation, is related to the authority of the DG. There are both internal and external dimensions to the issue of the DG's authority. While some see the DG as "*the spokesperson of the global response*", the external dimensions are obviously very much dependent on the relation to and the interests of the Member States. According to WHO's constitution as well as the IHR, the DG has substantive powers, but in reality, these appear to be very much constrained, especially as it is a common perception among experts interviewed that Member States are more proactively trying to influence decisions by the organisation and the DG than in the past.

One example for this is the DG's authority to declare a PHEIC. The present rules under the IHR require the DG to consult both the IHR Emergency Committee (IHR EC) and the country concerned. He/she then uses the information and advice to decide whether to declare a PHEIC and release Temporary Recommendations. It is uncommon for the DG to decide differently from advice received from the EC and the country concerned, although it is possible in some cases, e.g., if a country would not appear to be very cooperative or if the IHR Emergency Committee is not able to come to a clear conclusion.

On 22 January 2020 the opinions of the members of the EC were divided as to whether the SARS-CoV-2 outbreak met the criteria for a PHEIC. The DG then decided to ask them to review additional information, which had arrived during the day, and to continue their discussions on the next day. On 23 January the EC met again and due to the limited information available at that time, its members were equally divided as to whether the event constituted a PHEIC, especially as this binary nature of the PHEIC did not leave room for some kind of an intermediate alert. Therefore, the DG was advised not to declare a PHEIC and to reconvene the committee within 10 days. The DG followed this advice and informed Member States and the general public of WHO's risk assessment, emphasizing that the outbreak would constitute "a very high risk in China, and a high risk regionally and globally" (61). When the SARS-CoV-2-outbreak spread to more countries and the number of cases and fatalities grew quickly, the EC reconvened on January 30 and, based on additional evidence, especially concerning the possibility of human-to-human transmission of the virus, advised the DG to declare a PHEIC and publish Temporary Recommendations (32). The DG accepted this advice. He also called on all countries "to implement decisions that are evidence-based and consistent", and at the same time he emphasized that there would be "no reason for measures that unnecessarily interfere with international travel and trade".

Several questions arise from this example: Should the DG have used his own judgement and declared a PHEIC when the EC could not come to a conclusion, a development allowed under article 12 and 49 of the IHR? Why would the DG mainly rely on an ad-hoc committee of 15 experts, highly skilled in technical areas like virology, immunology, and epidemiology, for such an extremely important decision affecting many different areas (including travel and trade)? Would it be better for these important deliberations, potentially affecting billions of people, to be conducted in a more transparent fashion?

Some stakeholders interviewed by the Independent Panel say that the DG should have followed the precautionary principle and declared a PHEIC on January 23. Others are of the opinion that it is the duty of the DG to listen to and rely on the advice from experts from within and outside of WHO as well as from the affected Member State, to regularly review the information and scientific evidence first, and then to take the final decision. Some experts have also expressed the opinion that the system is such that the decisions of a Director-General under article 12 may be open to influence and delay because of political considerations. It was emphasized that especially WHO's emergency work needs to be independent and protected from political influence.

The authority of the DG is heavily dependent on the official information and data the affected member states are able and willing to share with WHO. The DG can ask for additional information or the verification of signals and other data received by third parties and through informal systems. But there are no standing arrangements for pre-approval from countries for the DG, for example, to rapidly dispatch a WHO emergency group of scientists, technical advisors, and coordinators into the affected countries to support Member States in the investigation of an emerging health threat, the risk assessment, and the identification of suitable public health measures to prevent an outbreak from spreading further nationally and internationally.

The authority of the DG is also limited when it comes to the implementation of and adherence to the IHR by Member States. WHO and the DG can only offer advice, technical support, and other measures such as simulation exercises. Further, if a Member State does not follow the binding regulations, establish a national focal point, or ensure core capacities are in place, the DG has no enforcement authority. As previous outbreaks and the current pandemic have shown pandemic prevention, preparedness, and response are undermined by the lack of implementation of the IHR, and require strong accountability of Member States. Enforcement capabilities on the part of WHO may be a means to help fill some of these crucial gaps.

But WHO and the DG could also act apart from the formal, highly regulated pathways. Former DG Dr Gro Harlem Brundtland made a very clear statement on SARS during the 2003 outbreak. When outbreaks of cholera in Ethiopia and Ebola in Tanzania occurred in recent years, WHO was informally very active, but carried out its work discreetly and did not react publicly to the situation. During a health emergency such as a pandemic, the Director-General on paper

appears to have many of the necessary authorities, formally and legally, to perform expected tasks both for internal decisions and for communicating with and guiding the world at large. In reality, this is often a diplomatic tightrope with many challenges for the DG to actually use the authority to fulfill WHO's mandate. It would strengthen the

Declaration of a PHEIC can have immense repercussions for affected countries including a perceived loss of their sovereign control in relation to an outbreak as impacts on other states come into play, identification of the country as a source of infection, and damages to travel and trade. The DG might feel overwhelmed with the huge burden this formal authority includes, especially when Member States and the global media are eagerly waiting for a clear, evidence-based and transparent decision.

It therefore appears to be important to continue the dialogue among stakeholders in order to not only understand cultural, social, and the environmental circumstances better, but also to build up the necessary trust to be able to act on the authority and to gain legitimacy in dealing with Member States. Authority is based on mutual respect and trust, built up and earned over years and responding to cultural differences.

WHO has one of the most inclusive election systems for appointing its executive head in the UN system, with all 194 Member States having a vote. A reform introduced for the most recent election in 2017, which ensures the decision is taken by the full membership and not just those Member States on the Executive Board. The independence and integrity of the office of the WHO Director-General could be further strengthened by limiting the term to one instead of two terms (of 5 or 7 years), and doing the same for the WHO Regional Directors; this is a general principle that could be applied to other elected heads of UN Specialized Agencies and other international organizations.

In summary:

- The authority and integrity of the office of the Director-General could be strengthened limiting the term to one instead of two (of 5 or 7 years), and doing the same for the Regional Directors.
- It would be useful to have an up-front agreement with national governments that they will accept and welcome WHO to immediately validate suspicions of disease outbreak and to inform the rest of the world more rapidly, and with more independence, compared to what the present IHR allows.
- In case of a non-cooperative country, the DG could ask the EB members for their (political) engagement and active support.
- A standing sub-committee for emergencies of the Executive Board could be included in the decision-making processes during emergencies, e.g., as observers of the IHR EC and additional advisors to the Secretariat. There are different views on this option.

4.6 What has been and what should be WHO's role in the international system at large?

WHO has an important role to play in the international system at large for the prevention, preparedness, and response to a global health emergency. But there are differing views on what that role should be and, on its role, has been so far during the COVID-19 pandemic. This brief overview is based on literature and document reviews as well as interviews with a wide range of stakeholders involved in pandemic preparedness and response from all six WHO regions. Some specific aspects, for example, concerning WHO's role in the field of research and development, vaccine manufacturing and distribution, and risk assessment and communications are not covered here, as they are included in the respective background documents of the Independent Panel.

WHO is part of the United Nations (UN) family and plays an active role in the UN system, but as a technical agency with its own governing board it has no legal or formal links to the UN General Assembly, the Security Council, United Nations Economic and Social Council (ECOSOC) or the UN Secretary-General (UNSG). At a country level, WHO is a member of the UN Country Team in countries where one has been established. Furthermore, the WHO Secretariat participates in a number of UN coordinating structures: for example, the WHO DG regularly joins the Chief Executives Board for Coordination (CEB) chaired by the UNSG. WHO is also a member of the UN Sustainable Development Group chaired by the Deputy UNSG.

WHO is presently chairing the UN Crisis Management Team, the highest-level coordination structure that is convened to tackle specific major crises when they arise.

The United Nations General Assembly (UNGA) can adopt resolutions that relate to WHO actions (e.g. Political Declaration of the High-Level Meeting of the General Assembly on the Prevention and Control of Non-Communicable Diseases). Formally, UNGA resolutions cannot direct the work of WHO nor supersede decisions made by the WHA. However, in practice these decisions still matter because the same governments vote on resolutions at WHA and at UNGA, although they are not always represented by the same parts of government.

WHO has been asked to brief the Security Council on only a few occasions: in 2000 and 2011 the Security Council adopted a resolution recognising the threat of the HIV and AIDS epidemic, then on 18th September 2014, it adopted a resolution to state that the Ebola Virus Disease (EVD) outbreak threatened international peace and security through its uncontrolled spread in West Africa. In July 2020 it adopted a similar resolution regarding COVID-19, 111 days after a Public Health Emergency of International Concern (PHEIC) was declared by WHO. There were major challenges in finalising the COVID-19 resolution, largely due to a dispute about referencing WHO in the resolution. The United States, which had at that time expressed plans to leave the WHO, did not want to reference the WHO in the text.

Within the broader humanitarian system there are well-established structures for the coordination of UN and non-UN groups during emergencies such as pandemics, for example the cluster system. This is coordinated by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), and the health cluster is led by WHO. WHO also participates in the Inter-Agency Standing Committee (IASC) where civil society organisations also have a seat. WHO is the cluster lead for health.

There are less well-established structures for coordination between WHO and International Financial Institutions (IFIs) and the mood for collaboration has varied over time.

WHO is also working with the two major global health funds; GAVI and GFATM. In the case of GAVI there is a formalized collaboration and WHO receives funding from the GAVI budget for its immunization and health systems work (GAVI is the 5th largest funder of WHO voluntary contributions). There is a memorandum of understanding with the Global Fund under which WHO provides technical advice.

All of the interviewed by the Independent Panel agreed that WHO must take a leading and coordinating role in the event of a pandemic or another health emergency. Its specific role in the UN-Crisis Management Team during the COVID-19 pandemic so far was regarded as positive and useful. WHO, UNICEF, UNDP, and WFP are described as the key UN agencies involved in the response to the COVID-19 pandemic. According to stakeholders interviewed the relationships and coordination among these and with other stakeholders such as NGOs worked well in some countries and especially on the regional level.

However, there were different views in terms of the specific potential role for WHO to lead and coordinate the overall response if the scope of the response goes far beyond the health sector where other UN or international organizations are more experienced, and better equipped and connected, especially on the national and sub-national levels. Some experts emphasized WHO's important advocacy role as its access to key decision makers on the national level appeared to be easier in comparison to other international organizations. Hence, WHO should try to ensure an on-going high-level dialogue in the countries. While WHO's role was generally appreciated by most stakeholders interviewed, there seems to be less clarity about WHO's specific functions at the global, regional, and country levels, particularly when it comes to its leadership role. Should the organization lead others, even in the field? Or should it be more of a convenor? How operational should WHO be when it comes to health emergencies?

In relation to its technical and normative functions, experts agree that WHO should be the global leading authority for health surveillance and alerts with an early notification system in place, which is technically sound and protected as much as possible from political interferences. This alert system should be closely linked to the provision of technical guidance and information on public health and medical countermeasures.

Experts in a roundtable discussion on “From Science to Policy”, which the Independent Panel conducted in January 2021, agreed that WHO’s normative role is now highly appreciated globally. WHO should be the point of reference for guidance, based on the latest scientific evidence, and should keep a repository of technical knowledge and expertise. Its strong normative role has also appeared to have strengthened WHO’s role as the technical lead within the UN teams on the country level.

In regard to the functioning of the IHR, the role of WHO is seen differently. While some experts believe that WHO would be the “*guardian*” of the IHR, others are of the opinion that the regulations “*were created to limit the power of WHO*” to execute some of its core functions. The work of the IHR secretariat is often limited due to the lack of data and information reported by the National Focal Points in the Member States. Despite the IHR being a legally binding instrument, WHO does not have any regulatory or sanctioning opportunities to ensure that they are sufficiently implemented by Member States.

Stakeholders are also divided in considering how operative WHO should be in the field during a health emergency. The establishment of WHO’s new Emergency Programme was widely appreciated and is already being seen as an important achievement. For example, the response to the Ebola outbreak in DRC had been much more efficient in comparison to the response to the Ebola outbreak in West Africa 2014-2016. But experts interviewed are convinced that WHO “*should not be the global fire brigade*”, as it cannot do everything everywhere without overstretching the capacities of the organization. Instead, WHO should strengthen its collaboration and cooperation with Member States and international and national actors involved in the area of pandemic prevention, preparedness, and response.

There is an overall lack of strategic thinking on the political level about how different international actors and their roles and functions complement one another. There are certain functions where there is broad agreement on the role WHO should play: norms and standards, technical guidance, convening. There are also functions where views diverge: for instance, in operational tasks such as procurement and distribution of commodities, conducting research and coordinating other actors within the international system. One stakeholder interviewed summarized these discussion as follows:

“Let me start by saying I think WHO plays an irreplaceable, indispensable role in pandemic preparedness and response. You need a global institution with legitimacy to be the home of global data surveillance, reporting, and the nexus of normative and technical guidance. That is in my mind the core of what WHO should be doing. It should be saying this is what is happening, this is what we need to be doing about it; and this is ‘how’ we do it in terms of technical guidance.”

4.7 In what way has the present political environment affected WHO's performance?

The performance of WHO, both for COVID-19 and non-COVID-19 related health problems, has been affected throughout the pandemic by the political and social environment around the globe. Contributors include: Geopolitical conflicts; nationalism; a crisis of multilateralism; enormous pressure due to so-called "infodemics"; a lack of trust in public authorities on the global, regional, national, and sub-national levels, between and within Member States, and a lack of solidarity, on top of the pre-existing politicization of the organization.

The so-called "infodemic" has triggered conspiracy theories and unjustified accusations, leading to a decreasing trust in politicians, public health authorities, and scientists alike. The pandemic and its wide-reaching socio-economic impacts have also heightened existing disputes within and between countries. While WHO's Member States have responded very differently to the pandemic, international health organisations, especially WHO, have important roles to play to support all countries and to lead and coordinate the global and regional responses, despite their formal powers being limited and their effectiveness dependent on the cooperation of countries and other actors (62).

An analysis by a group of investigative journalists has shown, that WHO DG Tedros, and other health officials such as Anthony Fauci (US NIH) or UK's Chief Medical Officer, Chris Whitty, have been experiencing hate on social media channels like Twitter during the COVID-19 pandemic. While this kind of criticism is often rooted in genuine human frustration, the analysis revealed the presence of a coordinated network of inauthentic accounts targeting, e.g., DG Tedros on Twitter. Within minutes of many of his daily tweets going live, he is flooded with personal attacks, memes, and slurs. Often these kind of attacks conducted in a coordinated manner have a political background trying to distort public debate and to prevent honest discussions in the digital space (63).

Similarly, the politicization of the pandemic has led a suppression of science for political and financial gain, even in highly developed countries with strong academic institutions. Science is rarely absolute, and it seldom applies to every setting or every population in the same way. It is obviously difficult to follow the science when research data and analysis are limited in a fast-evolving emergency situation. But politicians still need to be informed and guided by science when they decide policy for their publics to retain public and professional trust (64). This applies especially if the science to policy system, including its decision-making processes and the selection of experts and other advisors, is not transparent, affected by political interference, and compromised by conflicts of interests. *"Politicization of science was enthusiastically deployed by some of history's worst autocrats and dictators, and it now appears to be regrettably commonplace in democracies"* (65).

The resulting distrust in science and “infodemics”, which have triggered this as well, has also led to a distrust in WHO’s evidence-based recommendations. Hence, WHO intensified its public outreach, not only providing technical guidance and risk communications to the decision-makers, but increasingly so to the general public, through very regular press conferences, social media activities, by working with leading internet companies such as Google, Twitter, or Facebook, and by starting a global movement to “*promote access to health information and mitigate harm from health misinformation among online and offline communities*” (66).

Another example of political interference is the case of remdesivir, when the European Union signed an agreement for the supply of the drug as a treatment for COVID-19 with a manufacturer of antivirals and the US Food and Drug Administration (FDA) approved this drug for this purpose. Scientists following the related trials closely were “*baffled*” about these decisions, especially as the largest, controlled study, WHO’s Solidarity trial, had shown that the remdesivir did not reduce mortality or recovery time of COVID-19 patients (67). These politically influenced decisions therefore not only neglected the results of the Solidarity trial, including more than 12,000 patients across 30 countries to provide important evidence on the ineffectiveness of, e.g., hydroxychloroquine, remdesivir and interferon on survival of COVID-19 patients, they also deliberately ignored WHO’s leading role in conveying and coordinating global research activities (44).

These kinds of challenges around the work of WHO and expressions of a lack of confidence in the organization, even by some of its own Member States, have been further enhanced by geopolitical tensions. At the very beginning of 2020, the United Nations Secretary-General observed that “*geopolitical tensions are at their highest level this century*” (68). This was the world into which COVID-19 emerged, and the pandemic has been a vehicle for the expression of those tensions as well as an exacerbating factor. It has also been reflected in the initial failure of the United Nations Security Council to achieve consensus around resolutions in response to the pandemic. This impasse is remarkable in the face of a global crisis with the dimensions of this pandemic (69).

Several experts interviewed by the Independent Panel were of the opinion that the political environment has been harmful for WHO’s leadership and performance over time and even now during the pandemic. “*Political conflicts have severely crippled the WHO*” -- its financial dependency on a limited number of key donors appear to make this issue even worse. Due to these budget constraints, WHO is not able to independently set and implement its own programme priorities and is exercising caution in criticizing or judging its Member States as it is “*reliant upon their goodwill*” (70).

In addition, WHO is often being “*used as a scapegoat by national governments*” who failed to prepare sufficiently for and to respond adequately to the pandemic. The technical and scientific expertise of WHO would need to be protected at all costs and therefore financial independence would be essential for the organization. Some experts are of the opinion that reasons not to

follow some of WHO's recommendations, were "clearly about domestic political pressures, and the political fallout of shutting down your society". As these political pressures won't disappear, it would be of utmost importance to *"not design a process that pretends that politics isn't there"*. Therefore, international organisations such as WHO would have an important role at the nexus between science and politics as they can provide national political leaders with independent, evidence-based advice and strategic guidance for them to make difficult political decisions.

Finally, an analysis by the University of Cambridge suggests that *"criticisms leveled at the WHO since the onset of the COVID-19 pandemic are fundamentally misguided"*. While the organization *"failed to lead the world to attain the highest possible level of health"*, the real failure lay with the Member States who designed it as the organization not equipped for its specific purposes and the challenges it faces. These imperfections were built into the original concept in 1948 and were later again repeated in the adoption of the IHR in 2005. According to the authors of the analysis, member states have so far *"not shown their political will to re-fit the WHO to meet its complex task of securing inter-state cooperation"* and to adopt a concept of *"shared sovereignty"* in the long-term interest of all (71).

In summary:

- The WHO has been underpowered to do the job expected of it. The Independent Panel is struck that the power of WHO to validate reports of disease outbreaks for their pandemic potential and to be able to deploy support and containment resources to local areas is gravely limited and that national political interests appear to be affecting its work in many ways. The incentives for cooperation are too weak to ensure the effective engagement of States with the international system in a disciplined, transparent, accountable and timely manner.
- The impact of this pandemic should provide a once-in-a-generation opportunity for Member States to recognize the common benefit of a suitably reinforced suite of tools available to the international system to enable robust pandemic alert and outbreak containment functions (69). While WHO's founding was driven by the *"aspirations and health needs of the postwar period. In the twenty-first century, it is high time for a different conversation"* (72).

REGIONAL RESPONSES

4.7.1 WHO Regional Office for Africa (AFRO)

The COVID-19 pandemic resulted in repurposing both human and financial resources for pandemic response to the pandemic, leading to less attention of other programmes (e.g., for UHC), especially in the first months of 2020. Despite challenge, the pandemic also led to using a more integrated approach to programming. Sharing of experiences and best practice examples with countries has become more effective, the mobilization of financial resources to strengthen health systems has increased, and continuity of services and programmes can be strengthened with savings related to the reduction of travel costs and the increase of teleworking. While AFRO had to refocus its work to address COVID-19 needs in the region, still 96% of planned products and services were scheduled to be implemented or achieved, while the remaining 4% were either delayed or suspended. The implementation of some activities, especially those requiring personal meetings such as trainings and the provision of on-ground technical support, have been negatively impacted but remain achievable.

The close cooperation with other regional organizations such as the African Union (AU) and the African Centers for Disease Control and Prevention resulted in an Africa Joint Continental Strategy for COVID-19 Outbreak on March 5, 2020 (48). Work with sub-regional organizations has proven to be very important for AFRO as well. Coordination with other UN agencies and service delivery on the country level was variable in some countries as agencies lacked in-country experiences. Member States interviewed by the Independent Panel said technical guidance provided by AFRO was positively received.

4.7.2 WHO Office for the Eastern Mediterranean (EMRO)

With 8.4% of its base budget postponed, delayed, or cancelled and 4.5% refocused towards the COVID-19 response activities, the EMRO Program of Work has been somewhat negatively impacted by the COVID-19 pandemic. Additional financial resources had to be mobilized both for emergency operations and for activities related to its work for Universal Health Coverage. More than 100 administrative and technical staff members at the regional and country offices have been assigned additional COVID-19 related task, substantially increasing their workload. Due to the disruption, several goals of the Program of Work will most likely not be fully achieved.

Many WHO country offices had to fully dedicate their work toward COVID-19-related activities. This resulted in a decrease in utilization of essential services driven by a lack of health care workers, intensive care units, and resources such as personal protective equipment and diagnostic testing kits. The EMRO region includes a number of conflict countries and many Member States only have weak health systems, leading to a fast malfunctioning of these systems during the pandemic. Surveillance, alert, and response systems in affected countries have been very limited and often collapsed. Levels of emergency preparedness were already

known to be very low in the countries of the EMRO region and emergency management capacities were very limited even before COVID-19 struck. Delivering technical support and in-country support has become increasingly difficult for EMRO staff leading to an increasing workload. Staff retention and motivation challenges have been noted leading to some reductions in productivity and the interruption of some key functions.

The enormous challenges observed by Member States in the EMRO region during the pandemic have led to an increased understanding of the importance of preparedness, sound emergency response capacities, and the reliable availability of resources for health emergencies. WHO's leading and coordinating role both on the global and regional level has also been increasingly acknowledged. Overall, it appears that a favorable context has been created to ensure Member States commitment to increased investments in health systems and pandemic prevention ("One Health" approach), preparedness, and response.

4.7.3 WHO Regional Office for Europe (EURO)

The COVID-19 pandemic led to a major programmatic shift in the Programme of Work for EURO earlier than originally planned. The development of the European Programme of Work (EPW) 2020-2025 (49) had already started in fall 2019, when the Standing Committee of the Regional Committee (SCRC) mandated the new Regional Director begin with the process. In a number of subsequent sessions of the SCRC EURO ensured its Member States and Governing Body were informed and consulted throughout the development of the European Programme of Work, which was endorsed by the Regional Committee (RC70) in September 2020. In addition, ongoing lessons learned from the COVID-19 pandemic were continuously incorporated into the drafting and refinement processes of the EPW (50) and numerous consultations were held with a wide range of stakeholders, including Member States, Non-State actors, UN, and regional agencies and staff members among others.

EURO has been implementing a wide range of activities to strengthen country capacities to prepare for, prevent, control, mitigate, and manage health emergencies. All human resources of WHE have been dedicated to the response, supporting strategy implementation on the regional and country level. Due to COVID-19-related restrictions, few activities such as IHR monitoring and evaluation (including JEEs and simulation exercises), and several expert meetings and trainings had to be postponed to 2021. Based on gaps identified and lessons learned by countries, EURO expects an increase in requests for support from its Member States.

The network of IHR National Focal Points (NFPs) across the 55 IHR state parties in the EURO region has proven to be of great value for sharing information and organizing exchanges in various areas such as clinical and infection prevention and control (IPC) management. The COVID-19 pandemic has provided a real-life opportunity to practice and strengthen event detection, assessment, information sharing, and response monitoring for all countries of the region. The impact of the pandemic has shown the lack of prevention in areas such as surveillance and laboratory systems, IPC, and clinical management, as well as insufficient surge

capacities or flexibilities in health systems of many countries in the region. COVID-19 also has highlighted the importance of strengthening cooperation across the human, animal, and environmental health interface through a One Health approach, which is likely to play a more prominent role in the prevention and control of health security threats in the EURO region and beyond.

EURO has also convened a Pan-European Commission on Health and Sustainable Development as an independent and interdisciplinary group of leaders to rethink policy priorities in the light of pandemics. The Commission's work will be presented in a report to be published in September 2021 with recommendations on investments and reforms to improve health and social care systems (51).

4.7.4 The Pan American Health Organisation (PAHO)/AMRO

PAHO published the epidemiological alert for the novel coronavirus (SARS-CoV-2) on January 16, 2020. The alert recommended that Member States ensure that health workers have access to up-to-date information and be familiar with the principles and procedures for handling infections. PAHO provided a wide range of technical guidance materials to its Member States, especially during the early phase of the outbreak (52). The organisation launched a response strategy to the COVID-19 outbreak in the region of the Americas, with two main objectives: to slow transmission of the virus and to mitigate the health impact of COVID-19 in the region (53).

PAHO has supported the regional pandemic response, intensifying efforts to develop and adapt strategies in order to maintain the continuity of public health programmes and health services, aligned to the priorities of its Member States. The organisation also has continued its work to protect the regional public health agenda, working toward the commitments set with Member States in the strategic plan 2020-2025.

Internal performance monitoring and assessment reviews showed that the majority of entities reported that their biennial work plans were not on track due to the pandemic. Work plans were reorganised to promote transformative action to achieve universal health coverage, strengthen health services with a primary healthcare focus and a community centred approach, ensuring the continuity of health services, and the exercising of essential public health functions. PAHO has also observed an increase in inter-programmatic work reflected in the response to the pandemic.

Although pandemic response is a major challenge for the implementation PAHO's programme of work, COVID-19 can be seen as an opportunity to enhance other existing commitments. For example, virtual platforms provided an opportunity to expand to larger audiences while other web-based modalities have created new ways of technical cooperation while reducing costs at the same time.

4.7.5 WHO Regional Office for South-East Asia (SEARO)

SEARO published a strategic preparedness and response plan for the South-East Asia region in March 2020, advising its Member States to be prepared for containment, including active surveillance, early detection, isolation, and case management, contact tracing, and prevention of onward spread of the coronavirus infection (54). For additional technical advice SEARO referred to the WHO headquarters website.

During the pandemic, the regional and country offices continued to work closely with Member States, supporting their National Health programs and priorities, ensuring essential health services were maintained and progress on disease elimination continued. The use of new technologies/virtual platforms has increased and was further optimized for the work of the SEARO office and to ensure governing body functions. For example, the Regional Committee meeting in September 2020 was held virtually.

Although the major responsibility of responding to COVID-19 remains with the WHE, collaboration with other departments appeared to be key for a comprehensive and effective response. The strategy to mobilize expertise and support of other departments was a major policy shift established in the context of the pandemic response. The pandemic exacerbated existing challenges that countries in the region had been facing, for example, in the area of health systems development.

WHO supported countries by providing technical guidance and advice as well as supporting procurement issues, for example, when medical product deliveries were delayed due to lockdown and travel restrictions. As health systems in most of the Member States in the SEARO region were heavily affected by the pandemic, other health issues such as non-communicable diseases or mental health did not receive adequate attention and resources as many normal medical services were disrupted and funding had to be deviated.

4.7.6 The WHO Western Pacific Region (WPRO)

WPRO was the first region to be affected by the COVID-19 pandemic. The regional incident management support team was activated in January following the WHO emergency response framework process. WPRO published several technical guidance documents and a regional action plan for response to large scale community outbreaks of COVID-19 in April 2020 (55). This plan outlined the priorities for WHO and Member State actions in several key areas such as incident management and coordination, strategic communications, community engagement, non-pharmaceutical public health measures, surveillance and risk assessment, and operational logistics, among others.

Similar to the other regional offices of WHO, WPRO's processes had to be adjusted, including the development of a strategy for COVID-19 response. Policy and guidance documents were developed for Member States and are being periodically revised and refined. In addition, previous planned activities were reviewed and reprioritised and outputs were identified which

could be used in support of the COVID-19 response. The activities by both the incident management support team and within the reduced plan were monitored by the programme committee, whose role was expanded to cover the emergency COVID-19 response and its funding as well as the regular programme budget activities. For this purpose, the frequency of programme committee meetings was increased to two-weekly.

In general, the overall goals of WPRO's planned work programme remains feasible. Alternative ways are being utilised, as applicable, to achieve further progress on key activities and outputs. Some delays in activities had to be accepted due to the need to repurpose significant numbers of staff to assist in the COVID-19 response. This was particularly the case in the first 3-4 months of the response at the regional level, but meanwhile ways have been identified to foster the implementation of the non-COVID related work, which is now at about 70% of what was originally planned. In his report to the Regional Committee in October 2020, the Regional Director describes how Member States were supported in their response to the pandemic and how the regional investments for health emergency preparedness in response within the last decades have proven to be crucial. "Invaluable lessons" were learned from the shared experiences with SARS and H1N1 influenza, which now are the basis for both WPRO and its Member States to leverage and strengthen regional and national responses to the pandemic (56).

Research

WHO created a new Science Division and a new Department of Quality Assurance of Norms and Standards in 2019 in order to improve the processes for publishing evidence-based, timely, relevant, and impactful scientific recommendations. A quality assurance mechanism was established within the Science Division to ensure that all guidelines and normative products of WHO meet high standards in terms of process, methods, reporting, and presentation as well as impact.

Following the PHEIC declaration on January 30, WHO's R&D Blueprint was activated to accelerate diagnostics, vaccines, and therapeutics for the novel coronavirus. The Blueprint is a global strategy and preparedness plan aimed at improving coordination between scientists and global health professionals, accelerating the research and development process for tests, vaccines, and medicines, and developing new norms and standards to learn from and improve on the global response. In addition, the Blueprint is used to strengthen channels for information sharing among countries (41).

To prepare a Coordinated Global Research Roadmap (42) WHO hosted a Global Research and Innovation Forum in collaboration with the Global Research Collaboration for Infectious Disease Preparedness and Response (GLOPID-R) on February 11-12, 2020. More than 400 participants from across the world came together, including scientists, Member States' representatives, public health professionals, funders, and private sector representatives, to accelerate the development of innovations to control the epidemic, using the R&D Blueprint strategy as a framework. Research topics discussed included: 1) virus: natural history, transmission and diagnostics; 2) animal and environmental research on the virus origin, and management measures at the human-animal interface; 3) epidemiological studies; 4) clinical characterization and management; 5) infection prevention and control, including health care workers' protection; 6) candidate therapeutics R&D; 7) candidate vaccines R&D; 8) ethical considerations for research and; 9) integrating social sciences in the outbreak response. The Global Research Roadmap includes immediate, mid-term, and longer-term priorities to build a robust global research response on the basis of the deliberations during the Global Research Forum.

WHO also is facilitating accelerated efforts in the area of vaccines research on a large scale. The organization has been harnessing a broad global coalition to develop and evaluate candidate vaccines as quickly and safely as possible by convening and coordinating multiple public and private partners and using the best scientific and public health evidence and ethical principles. In addition, candidate vaccines across the world are being mapped and their development progress closely observed. A regular open dialogue between researchers and vaccine developers is fostered to expedite the exchange of scientific results, debate concerns, and propose rapid and robust methods for vaccine evaluation.

WHO is supporting coordinating clinical trials globally to accelerate multiple actions with the aim of providing a safe and effective vaccine as early as possible (43). Another example for WHO's role in conveying and coordinating global research activities during the COVID-19 response is the SOLIDARITY-trial which has recruited almost 12,000 patients across 30 countries and provided important evidence on the ineffectiveness of countermeasures such as hydroxychloroquine and is the largest trial examining the effects of Remdesivir and interferon on survival (44).

On January 12, 2021 WHO held a day-long virtual meeting of scientists from around the globe, bringing together more than 1,750 experts from 124 countries to discuss **critical knowledge gaps and research priorities**, especially for **emerging variants** of the virus (45). This event was structured around six themes covering epidemiology and mathematical modelling, evolutionary biology, animal models, assays and diagnostics, clinical management and therapeutics and vaccines. Scientists highlighted the importance of national data platforms to document critical clinical, epidemiological, and virus data facilitating the detection and assessment of new SARS-CoV-2 variants. The collective goal of the scientists in this meeting was *"to get ahead of the game and have a global mechanism to quickly identify and study variants of concern and understand their implications for disease control effort"* (45).

During this early phase of the outbreak, a fast-growing number of scientists, networks, national, and international public health agencies activated, some of which worked closely with WHO. The organization held a number of scientific meetings in different areas of pandemic preparedness and response and led the evidence curation and coordinating scientific collaborations. Some countries began to set up their own national scientific advisory committees and also turned to WHO's Regional Offices and other regional health authorities, such as Africa CDC or European CDC, for additional advice more closely related to regional and national contexts. An increasing number of recommendations were made by these organizations, especially between mid-March and July 2020.

During this time WHO refined its work by making its processes more effective and by introducing a system of "living" guidance for key recommendations in order to make these available faster. Comprehensive document and literature reviews as well as expert consultations and roundtable discussions indicate WHO's essential role in evidence curation and convening. The mechanisms the organization used appear in most cases to be adequate for a timely response to a health emergency such as a pandemic.

The emergence of COVID-19 has led to many advances in epidemiology, clinical care, prevention, and treatment, and an unprecedented speed of vaccine development, driven by global collaboration and data sharing, supported, coordinated, and partially led by WHO. Open data sharing and collaborations among groups have proven to be successful, but duplication of efforts and a large amount of non-peer-reviewed papers have been published related to COVID-19. A search of ClinicalTrials.gov shows hundreds of small, underpowered trials of COVID-19 treatments, and large numbers of retrospective studies attempting to answer similar questions

(39). WHO could potentially further strengthen its scientific and normative work and play an even stronger leadership role in evidence curation and convening, fostering collaboration within the organization and its different levels, and between external stakeholders.

An independent, recently published study on the coevolution of policy and science during the pandemic analyzed more than 37,000 policy documents published by government agencies and think tanks from 114 countries and 55 intergovernmental organizations (IGOs), from 2 January to 26 May 2020 (40). The main aim of this study was to examine the coevolution of policy and science during the COVID-19 pandemic. The results show that while government agencies produced the most COVID-19 policy documents, they were least likely to cite scientific articles, making the evidence base more difficult to assess. In contrast, policy documents that were grounded in science were disproportionately produced by IGOs, especially by WHO, and drew on high impact science. The authors of the study suggest a *“key role of WHO and other IGOs in the global policy response to COVID-19, acting as central conduits that link policy to science.”* Overall, WHO has unique capabilities and authority to produce technical guidance of highest quality, supported by its extended scientific networks, even when only a limited evidence base is available.

Despite the many scientific and policy successes, there is room for improvement, especially in the area of timeliness, including speed of reporting by affected countries and deployment of scientific and technical experts coordinated by WHO. Improvements in these areas would strengthen the evidence base for recommendations and alerts, leading to stronger arguments for their uptake, implementation, and acceptance in the general public. Secondly, official dissemination and distribution channels need to be made clearer and mechanisms established to monitor and evaluate uptake by WHO Member States and the effectiveness of recommendations made. Thirdly, Member States need to review their own systems and processes for pandemic preparedness and response and to be able to respond to alerts and recommendations made by WHO and other international organizations in a timelier manner. Finally, national governments need to make their decision-making processes more transparent as well as to build up public trust ensuring the quick uptake of public health measures and the success of the response.

Communication

WHO began in February 2020 to identify and take steps to counter the COVID-19 ‘infodemic’, characterized as an “overabundance of information – some accurate and some not – that occurs during an epidemic.” Infodemics, WHO said, “can lead to confusion and ultimately mistrust in governments and public health response.” WHO’s efforts to develop infodemiology as a science by identifying a research agenda and publishing on the area, investing significantly in social media ‘listening’ which helps countries identify problem areas and address them, and through ‘mythbusting’ has been a strong addition to its communications. As part of this work, WHO has partnered with social media companies to a degree never seen before. Over time this has resulted in bringing ‘good’ information to the top of social media sites and sinking unreliable information downwards.

While WHO’s “infodemiology” and social media work has been strong, there are some however who say the organization has disproportionately invested in this area, and not enough in ‘community engagement’ including for the 3.7 billion people who are offline. To help to address this, WHO has become part of “The Collective Service,” a newer cross-agency partnership that also includes GOARN, the IFRC, and UNICEF. The collaboration brings the strengths of each agency (technical guidance, communication for development, large volunteer base) to bear on risk communication and community engagement. Launched in June 2020 as a pilot for six months, the initiative is developing the structures and mechanisms required for a coordinated community-centered approach that is embedded across public health, humanitarian, and development response efforts.

To prepare for future pandemic threats, WHO must be in a position to communicate risks, while maintaining trust within both online and offline communities. To achieve this, WHO should continue to build its capacity to communicate rapidly, accurately, and transparently, and listening to concerns and misperceptions in order to help address and correct them. Further, WHO should communicate as ‘one WHO’ - and internal discussions within risk communication, leadership communication, the social media teams, the regions, and countries should be solved internally to avoid inconsistencies externally or perceptions of political favouritism. Regional and country communication capacity must also be considerably strengthened. While WHO HQ may be a main source of information at the outset of a potential pandemic event, particularly to those with online access, regional and country offices also will be inundated with requests for information and support. As an event continues, people will look for information in their own languages, coordinated with them, and delivered in ways that make sense to them. That can't be done only from Geneva, and dedicated investment should be made to regions and countries to ensure professional communication support including in risk communication and community engagement.

References

- AU 2020. Africa joint continental strategy for COVID-19 outbreak. Addis Abeba, Ethiopia: Africa Centres for Disease Control and Prevention, Addis Ababa (Africa CDC).
- BEIGBEDER, Y. 2012. Die Weltgesundheitsorganisation im Wandel. *Vereinte Nationen: German Review on the United Nations*, 60, 195-201.
- CLIFT, C. 2014. What's the World Health Organization For. *London: Chatham House*.
- ELBE, S. 2010. Haggling over viruses: the downside risks of securitizing infectious disease. *Health Policy and Planning*, 25, 476-485.
- FIDLER, D. 2007. Architecture amidst anarchy: global health's quest for governance. *1 Global Health Governance (2007)*.
- GOSTIN, L. O. & SRIDHAR, D. 2014. Global health and the law. *New England Journal of Medicine*, 370, 1732-1740.
- HARMAN, S. 2010. *The World Bank and HIV/AIDS: Setting a global agenda*, Routledge.
- HARMAN, S. 2013. *International organization and global governance*, Routledge.
- HORTON, R. 2017. Offline: WHO—a roadmap to renewal? *The Lancet*, 390, 2230.
- IOAC 2018. Special report to the Director-General of World Health Organization Geneva, Switzerland: Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme.
- IOAC 2020a. The Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme, Looking back to move forward. Geneva, Switzerland: World Health Organization.
- IOAC 2020b. Interim report on WHO's response to COVID-19 January-April 2020. Geneva, Switzerland: Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme.
- IPPPR 2020. Program of Work. Geneva, Switzerland: Independent Panel for Pandemic Preparedness and Response.
- LEE, K. 2003. The Global Trade and Public Health Nexus: The Role of WHO. *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy*, 13, 61-65.
- LEE, K. 2014. World Health Organization. *Handbook of Governance and Security*. Edward Elgar Publishing.
- LEE, K. 2017. Business as Usual: A Lack of Institutional Innovation in Global Health Governance: Comment on "Global Health Governance Challenges 2016—Are We Ready?". *International journal of health policy and management*, 6, 165.
- LEGGÉ, D. 2012. Future of WHO hangs in the balance. *Bmj*, 345.
- NG, N. Y. & RUGER, J. P. 2011. Global health governance at a crossroads. *Global health governance: the scholarly journal for the new health security paradigm*, 3, 1.
- OECD 2016. International Regulatory Co-operation and International Organisations, The Case of the World Health Organization (WHO). Paris, France: Organisation for Economic Cooperation and Development / WHO.
- PAHO 2020a. Epidemiological Alert Novel coronavirus (nCoV). Washington DC, USA: Pan American Health Organization.
- PAHO 2020b. Response to COVID-19 Outbreak in the Region of the Americas. Washington DC, USA: Pan American Health Organization.
- PIOT, P., SOKA, M. J. & SPENCER, J. 2019. Emergent threats: lessons learnt from Ebola. *International Health*, 11, 334-337.

- PWC 2017. Leadership and management at WHO Evaluation of WHO Reform (2011-2017), third stage. Geneva, Switzerland: PricewaterhouseCoopersSA.
- RUGER, J. P. & YACH, D. 2009. The global role of the World Health Organization. *Global health governance: the scholarly journal for the new health security paradigm*, 2, 1.
- SCOTT, J. & HARMAN, S. 2013. Beyond trips: Why the wto's Doha Round is unhealthy. *Third World Quarterly*, 34, 1361-1376.
- SEARO 2020a. 2019 Novel Coronavirus, Strategic Preparedness and Response plan for the South-East Asia Region. New Delhi, India: WHO Regional Office for South-East Asia.
- SEARO 2020b. WHO South-East Asia region member states declaration on collective response to COVID-19. New Delhi, India: WHO Regional Office for South-East Asia.
- SEVERINO, J.-M. 2010. The end of ODA (II): the birth of hypercollective action. *Center for Global Development Working Paper*.
- WHO 1946. Constitution of the World Health Organization. Geneva, Switzerland: World Health Organization.
- WHO 1997. Review of the Constitution and regional arrangements of the World Health Organization, Report of the special group. Executive Board 101st Session. Geneva, Switzerland: World Health Organization, Executive Board.
- WHO 2007. International Health Regulations (2005), Third Edition. Geneva, Switzerland: World Health Organization.
- WHO 2011. Global strategy and plan of action on public health, innovation and intellectual property. Geneva, Switzerland: World Health Organization.
- WHO 2016. Update, WHO Health Emergencies Programme: Progress and Priorities, Financing dialogue. Geneva, Switzerland: World Health Organization.
- WHO 2017. *Ten years of transformation: making WHO fit for purpose in the 21st century*, Geneva, Switzerland, World Health Organization.
- WHO 2018a. Thirteenth General Programme of Work, 2019-2023: Promote health, keep the world safe, serve the vulnerable. Geneva, Switzerland: World Health Organization.
- WHO 2018b. WHO's work in emergencies: prepare, prevent, detect and respond - Annual Report 2018. Geneva, Switzerland: World Health Organization.
- WHO 2020a. COVID-19 response, WHA 73.1. Geneva, Switzerland: World Health Assembly.
- WHO 2020b. Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme, Looking back to move forward. Geneva, Switzerland: World Health Organization.
- WHO 2020c. Report by the Director-General, EB146/2. Geneva, Switzerland: World Health Organization.
- WHO 2020d. The WHO Transformation, 2020 Progress Report. Geneva, Switzerland: World Health Organization.
- WHO. 2020e. *World Health Data Platform* [Online]. Geneva, Switzerland: World Health Organization. Available: <https://www.who.int/data> [Accessed March 3 2021].
- WHO. 2021a. *About us, Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme (IOAC)* [Online]. Geneva, Switzerland: World Health Organization. Available: <https://www.who.int/groups/independent-oversight-and-advisory-committee/about> [Accessed March 3 2021].
- WHO. 2021b. *WHO Director-General's opening remarks at 148th session of the Executive Board* [Online]. Geneva, Switzerland: WHO. Available: <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-148th-session-of-the-executive-board> [Accessed February 24 2021].

- WHO 2021c. WHO Transformation, Transforming for enhanced country impact. Geneva, Switzerland: World Health Organization.
- WHO/EURO 2020a. The COVID-19 pandemic: lessons learned for the WHO European Region: a living document, 15 September 2020. Copenhagen, Denmark: WHO Regional Office for Europe.
- WHO/EURO 2020b. COVID-19, Operationalization of the Global Response Strategy in the WHO European Region. Copenhagen, Denmark: WHO Regional Office for Europe.
- WHO/EURO 2020c. European Programme of Work, 2020-2025, United Action for Better Health in Europe (EPW). Copenhagen, Denmark: WHO Regional Office for Europe.
- WILLIAMS, O. 2004. 3.5 The WTO, Trade Rules and Global Health Security. *HEALTH, FOREIGN POLICY & SECURITY*, 73.
- WPRO 2020a. Report of the Regional Director. Manila, Philippines: WHO Regional Office for the Western Pacific.
- WPRO 2020b. WHO Western Pacific regional action plan for the response to large scale community outbreaks of COVID. Manila, Philippines: WHO Regional Office for the Western Pacific.
- YOUDE, J. 2016. Private actors, global health and learning the lessons of history. *Medicine, Conflict and Survival*, 32, 203-220.

5.