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Strengthening health systems during non-pandemic period: Toward universal health coverage in the pandemic agreement

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Abstract: Reflecting the experiences of the COVID-19 pandemic, the global response was reviewed by the Independent Review Panel for Pandemic Preparedness and Response. Based on the panel reports, the World Health Organization (WHO) member states decided to establish the intergovernmental negotiating body for drafting a WHO convention, agreement or other international instrument on pandemic prevention, preparedness and response, aiming for approval at the 77th World Health Assembly in 2024 (May 27- June 1). Amidst this process, the National Center for Global Health and Medicine, Japan (NCGM), as a global health organization focusing on health system strengthening in low- and middle-income countries, from the perspective of Universal Health Coverage (UHC), provided technical inputs to the representatives of the Japanese government. This paper summarizes crucial aspects of the NCGM inputs, including maintaining essential health services delivery during a pandemic, responding to evolving demand of health workforce, and ensuring the equitable distribution of pandemic products. These aspects can contribute to not only strengthening health crisis response and preparedness, but also achieving UHC. Therefore, the concerted efforts focusing on UHC and health crisis could yield synergistic effects. In addition, another aspect stresses the importance of social protection systems beyond health sector to reach vulnerable populations experiencing hardships during the COVID-19 pandemic. Since the whole-of-government approach including social policies is covered in the draft pandemic agreement, it is hoped that the upcoming pandemic agreement will trigger each member state to expand the scope of health crisis management beyond the health sector.

***Keywords*:** pandemic agreement, UHC, IHR, Health Security

Introduction

Since the first COVID-19 case was reported in China in December 2019 (*1*), SARS-CoV-2 rapidly spread around the world, leading to a declaration of "pandemic" by the World Health Organization (WHO) Director-General in March 2020 (*2*). Subsequently, continuous spread of the virus caused significant socio-economic losses and impacted non-COVID-19 health services worldwide.

Responding to the resolution of 73rd World Health Assembly (WHA) held in 2020, the independent panel for pandemic preparedness and response (IPPPR) was organized to review the WHO's response (*3*). Six months later, the IPPPR compiled the reports (*4*) during the 2nd Special WHA in December 2021, leading to the decision to establish the inter-governmental negotiation body (INB) to draft and negotiate a WHO convention, agreement or other international instrument on pandemic prevention, preparedness and response, aimed for approval at the 77th WHA in May 2024 (*5*). Subsequent intermittent meetings of INB organized the discussions on the agreement draft, culminating in the submission of the Negotiating Text in October 2023 (*6*), followed by the Revised Negotiating Text in March 2024 (*7*). Then, the outcome of INB including texts still under negotiations was submitted to the 77th WHA (*8*) for further consideration as a legally binding policy document covering comprehensively a wide range of items (*e.g.* strengthening health systems, manufacturing and access to related medical products, fundraising, and societal efforts beyond health), which after all, was agreed to extend the negotiation period for up to one year.

Throughout this process, we, the Bureau of International Health Cooperation, the National Center for Global Health and Medicine, Japan (NCGM), as a global health organization focusing on health system strengthening in low- and middle-income countries (LMICs) with the aim of Universal Health Coverage (UHC) achievement, have provided technical inputs to

Table 1. Crucial aspects of health system strengthening to be addressed from perspective of UHC in preparation for future pandemic and related article of negotiating text at 77th WHA

Addressing the "resilience" of health systems to the challenges clarified after the pandemic	
• Strengthening service delivery that does not cease even during a pandemic by – Developing the service continuity plans during pandemic and the simulations, – Strengthening health information system to capture health resources and utilization of those, – Leveraging lessons learned from previous pandemic and other emergency events, including community system or digital health.	Article 6
• Responding to evolving demand of healthcare workforce by – Providing opportunities to learn the basics of pandemic response and preparation, – Maintaining a surplus of workforce capacity during non-pandemic period to handle the pandemic response, – Building the capacity for community engagement, aligning with Primary Health Care oriented system.	Article 7
• Enhancing the domestic logistics for equitable distribution of pandemic products by – Assessing the capability of domestic supply chains, including the cold-chain system, regularly for further strengthening of the absorption capacity, – Considering the reduction of medical waste and the cost burden of waste disposal.	Article 13
Establishment of social protection system beyond the health sector to protect people's livelihoods even in times of city lockdowns and other social countermeasures	
• Strengthening resident registration system such as Civil Registration and Vital Statistics, national ID, • Having mechanisms and legal frameworks for social assistance as part of routine surge financing for health crises, • Enhancing coordinating mechanisms involving stakeholders across sectors during pandemic.	Article 17

the representatives of Japanese government participating in INB meetings, drawing on our longstanding experience and accumulated knowledge (*9*). Based on these experiences, at the time of the 77th WHA in 2024 (May 27- June 1), we summarized here crucial aspects of health system strengthening in preparation for future pandemics which are to be addressed particularly in LMICs from the perspective of UHC (Table 1).

Addressing the "resilience" of health systems to the challenges clarified after the pandemic

Strengthening service delivery that does not cease even during a pandemic

The experience of COVID-19 pandemic highlighted the importance of ensuring uninterrupted essential health services during health crises. In fact, during the pandemic, routine immunization programs have been delayed in many countries, leading to outbreaks of vaccine-preventable diseases (*10*). Considering these points, while the negotiating texts at the 77th WHA includes provisions regarding the maintenance of health services in Article 6, it does not mention the specific strategies. Such strategies are shown as follows.

First, development of emergency response plans during the non-pandemic period including service continuity plan should be highlighted to ensure uninterrupted essential health service delivery even during a pandemic. Based on the plans, regular simulations and training exercises should be also considered to provide more concrete knowledge and skills for the participants. Regarding the measures of the plan, there is potential to leverage lessons learned from efforts in response not only to pandemics but also to natural disasters, extreme weather conditions, and geographically isolated islands, which may be related to climate change. The applicable interventions may include multi-dose prescriptions for chronic diseases, mobilizing community systems through collaboration with civil society organization (CSO) / community based organization (CBO), and clinical monitoring via digital platforms.

Second, strengthening health information systems, including health information not directly related to pandemic diseases but to health resources, is crucial to maintain effective health service delivery as well as to monitor epidemic situations and intervention results. Information about resources such as health workforce, health facilities including equipment, and pharmaceuticals, utilization of those and the quality of services should be helpful to efficiently and effectively distribute limited resources to areas with high potential demand. Information, such as high-care unit bed occupancy, will also be important for triangulation of epidemiological information in the early stages of a pandemic when disease definition is not clear.

Some existing global guidance, for instance, in the field of human resources for health workforce cover the activities to maintain essential health services during health crises, including monitoring and evaluation of the implementation status (*11*). It is hoped that WHO will leverage these relevant documents to support each member state to implement the pandemic agreement.

Responding to evolving demand of health workforce

While Article 7 already addresses this issue, it is important to reiterate the significance of the healthcare workforce. The pandemic has highlighted quantitative and qualitative shortages of health workforce, regional and occupational disparities in distribution and retention, constrained labor markets, and vulnerable pre- and in-service training systems (*12*). Wide ranges of health workforce challenges have already been analyzed since the pre-pandemic period. Nonetheless, health workforce attrition and shortages would continue over the post-pandemic period and could destabilize the health system itself. Without solid and effective measures, preparedness and response to any future health crisis would be impossible (*13-15*).

What is needed for the health workforce to respond to crisis are: *i*) providing all health workforce with opportunities to learn the basics of pandemic response and preparation such as surveillance, early detection of diseases, infection prevention and control (IPC), through incorporation into pre- and in-service training during the non-pandemic period, and *ii*) maintaining a surplus of workforce capacity during the non-pandemic period even when it overlaps with regular duties, to ensure resilience to handle the pandemic response. Aligning health workforce policies with the Primary Health Care (PHC) oriented system (*13*) is particularly essential to provide necessary health care to the vulnerable or the hard-to-reach population to achieve UHC, even during the health crisis. Such a policy example is to invest in multidisciplinary PHC teams with optimized skill mix, adjusted scope of practice, and support with digital technologies, as well as enhanced collaboration with CSO/CBO to gain community engagement. Such PHC oriented systems can also contribute to early detection and risk assessment during a future pandemic.

At both national and local levels, capacity-building for health work force, including community engagement, becomes particularly important. Since the activities by government could not cover both responding to heath crisis and ensuring essential healthcare services at the same time, collaboration with community through CSO/CBO should be emphasized as surge capacity to increase the likelihood of necessary service delivery to unreached populations. It should be important to collaborate with communities and strengthen their capacities during a non-pandemic period.

Equitable distribution of pandemic products

While the negotiating texts of pandemic agreement at the 77th WHA emphasized the various items related to the equitable distribution of pharmaceuticals, particularly "pandemic products", during health crises, such as technology transfer, diversified manufacturing on a regional basis, global supply chain networks, and rules for international allocation, we would like to emphasize more on the importance of domestic supply chains in each country. The ability of regular medical supplies will, of course, greatly affect the ability to supply pandemic products in an emergency. During this pandemic, some of the COVID 19 vaccine required ultra-low temperature storage & transport for vaccines, ultra-cold chain, that posed challenges to supply chain infrastructure development in various countries, particularly countries with challenges in the cold chain of regular vaccines, highlighting the importance of maintaining cold chain logistics during the non-pandemic period. Another example is the absorption capacity of pandemic product, which is often in large volumes. Where supply chains are fragile, large quantities of donated pharmaceuticals might not be kept up by domestic supply, resulting in pharmaceuticals being wasted. Therefore, in addition to strengthening supply chains, it is necessary to thoroughly assess the absorption capacity of recipient countries before distributing aid supplies. While Article 13 mentions these points, it is important to re-emphasize the importance of domestic supply chain development during the non-pandemic period to ensure that essential medical products reach vulnerable populations in need during health crises.

In addition, addressing pharmaceutical medical waste is also essential. While Article 13bis mentions coordinating expiration dates, product usability, and the availability of related auxiliary products between recipient countries and supporting agencies to reduce medical waste, there is still a possibility of generating a certain amount of medical waste during emergencies. In such cases, considering the cost burden of waste disposal on the recipient countries becomes important, thus necessitating consideration of the cost burden of medical waste disposal.

Establishment of social protection systems beyond the health sector

During the COVID-19 pandemic, particularly vulnerable populations experiencing economic and psychological hardships due to measures like lockdowns resulted in low utilization of health services and deterioration of health. This highlighted the importance of broad-ranging measures beyond the health sector. For instance, it is crucial to identify who among the population is most vulnerable during a health crisis and maintain information on them during the non-pandemic period. Systematic understanding data such as residential registration, civil registration and vital statistics (CRVS), national IDs, and poverty status allows for the prioritization of social protection measures for impoverished individuals and households during pandemics. As Article 6 addresses such information systems, it is important to note its significance in response, including investigation of the target populations, implementation and monitoring of measures like vaccination campaigns. Furthermore, in countries where CRVS systems are fragile, it is important

to acknowledge those who may fall through the cracks of national ID systems. Governments should engage non-government actors through social contracting agreements to proactively identify vulnerable populations and ensure that pathways for delivering support are in place.

Additionally, during social measures such as lockdowns, protecting the livelihoods of vulnerable populations becomes crucial for effective healthcare responses during health crises. Social security systems for vulnerable populations are important from the perspective of UHC (*16*). In this pandemic, countries that implemented cash transfers to support vulnerable populations during lockdowns protected their health. Having mechanisms and legal frameworks for social assistance like cash transfers as part of routine surge financing for health crises allows for their utilization during emergencies (*16,17*). While Article 17 mentions such comprehensive social efforts, it is important to also consider social protection systems that function during health crises. Organizations like the ILO, UNICEF, and the World Bank are also working on social protection during health crises (*16*), and active collaboration with the healthcare sector, particularly WHO, is desirable.

Furthermore, coordinating mechanisms involving stakeholders across sectors are crucial. During health crises, various actors beyond the healthcare sector, including government ministries, civil society, other countries' governments, and international organizations, are involved. Understanding the strengths and limitations of each organization's support and effectively deploying resources for pandemic response requires coordination. For instance, establishing inter-sectoral coordination mechanisms like Public Health Emergency Operation Centers or Emergency Medical Team Coordination Cells during disasters involving multiple sectors becomes essential for pandemic response (*18,19*). Handling the complex coordination of different actors during pandemics may necessitate setting up domestic coordination mechanisms and conducting simulations and training during the non-pandemic period. In this regard, the upcoming pandemic agreement is expected to cover these elements.

Based on the drafts of the WHO convention, agreement and other international instruments on pandemic prevention, preparedness and response (*6-8*), vital points requiring further consideration, which each member state, especially among LMICs with weak health systems, has to address as part of their preparedness for future pandemics have been summarized. All the aforementioned aspects discuss activities aimed at delivering quality essential healthcare services during the non-pandemic period to all people, including vulnerable groups, and toward achieving UHC, highlight how these activities contribute to effective health crisis management. Furthermore, during the COVID-19 pandemic in Japan, activities such as establishing medical response teams for patients unable to visit hospitals during lockdowns were observed. Such health crisis measures have the potential to enhance a wide range of healthcare services contributing to UHC, including addressing aging and non-communicable diseases. Thus, activities supporting health crisis management and UHC are strongly interrelated, and concerted efforts focusing on both could yield synergistic effects. Expectations are for the pandemic agreement to provide a legal framework for both achieving UHC and advancing global health security together. Additionally, in order to reach vulnerable populations experiencing hardships during a pandemic, this article stressed the importance of not only health system strengthening, but also a social security system beyond the health sector. Since a whole-of-government approach including social policies is covered in the draft pandemic agreement, it is hoped that the upcoming pandemic agreement will trigger each member state to expand the scope of health crisis management beyond the health sector.

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