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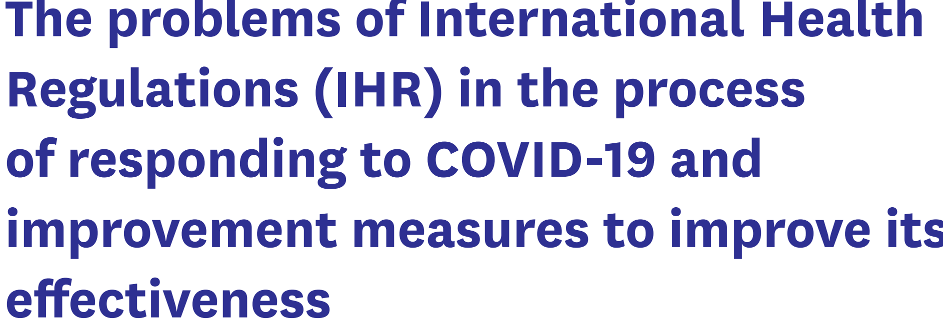

The problems of International Health Regulations (IHR) in the process of responding to COVID-19 and improvement measures to improve its effectiveness

Myungsei Sohn [1,2] **Dasol Ro** [2] **Dae Hyup Koh** [3] **Sookhyun Lee** [2,4]
So Yoon Kim [2]

[1]Research Investment for Global Health Technology Fund Foundation, Seoul, Korea
[2]Division of Medical Law and Bioethics, Department of Medical Humanities and Social Sciences, Yonsei University College of Medicine, Seoul, Korea
[3]Clinical Evidence Research, Division of Healthcare Technology Assessment Research, National Evidence-based Healthcare Collaborating Agency (NECA) and Graduate School of Public Health, Yonsei University, Seoul, Korea
[4]Global Network for Peace and Sustainable Progress (GNPSP), Seoul, Korea

ABSTRACT

The International Health Regulations (IHR) Review Committee analyzed the occurrence and response process of coronavirus disease 2019 (COVID-19) and reviewed the measures to be improved in the IHR regulations in 3 main aspects. The World Health Assembly (WHA) recognized IHR (2005) as currently legally binding international law in pandemic, proposed the establishment of an intergovernmental negotiating body, and decided to continue working to finally coordinate the revision of IHR (2005). The world must now establish a system that allows mankind to cope with infectious diseases through one unified IHR international law, and jointly respond to global crises faced by mankind such as biodiversity and climate change and sustainable development. Economic, information, and technological inequality triggered by COVID-19 calls for wise measures to resolve racial discrimination between regions. Now, joint efforts should be made to narrow the gap in rational inequality by accurately distinguishing and integrating the responsibilities between international organizations such as the United Nations (UN) and the World Health Organization (WHO).

Keywords: COVID-19

INTRODUCTION

In 2005, the World Health Organization (WHO) adopted International Health Regulations (IHR) that completely revised existing laws, forming a current legal framework for preventive defense management and response to international public health crises. IHR are designed to protect human rights in public health responses and achieve a higher level of global health security while avoiding unnecessary interference with international movement and trade. However, in the face of the coronavirus disease 2019 (COVID-19) crisis, IHR are not playing their role.

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Correspondence to
So Yoon Kim
Division of Medical Law and Bioethics, Department of Medical Humanities and Social Sciences, Yonsei University College of Medicine, 50-1 Yonsei-ro, Seodaemun-gu, Seoul 03722, Korea.
E-mail: syoonkim@yuhs.ac

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ORCID iDs
Myungsei Sohn
https://orcid.org/0000-0002-4817-0127
Dasol Ro
https://orcid.org/0000-0003-2448-8496
Dae Hyup Koh
https://orcid.org/0000-0003-2720-4006
Sookhyun Lee
https://orcid.org/0000-0003-2030-1276
So Yoon Kim
https://orcid.org/0000-0001-7015-357X

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Author Contributions
Conceptualization: Sohn M, Kim SY; Data curation: Kim SY; Funding acquisition: Lee S, Kim SY; Investigation: Ro D; Methodology: Ro

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D; Resources: Koh DH, Lee S; Writing - original draft: Sohn M, Ro D; Writing - review & editing: Sohn M, Kim SY.

On May 18, 2020, the World Health Assembly (WHA) was held for the first time since the outbreak of COVID-19 caused by the novel coronavirus severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection worldwide. The 73rd World Health Conference was held as a video for the first time in the history of WHO due to the global epidemic of COVID-19.

In 2005, the WHO adopted the IHR (2005), which completely revised existing rules, forming a current legal framework for preventive defense management and response to the Public Health Emergency of International Concern (PHEIC).

The IHR is designed to protect human rights and achieve a higher level of global health security in responding to public health while avoiding unnecessary interference with international movement and trade. However, IHR is not playing a role in responding to infectious diseases as countries' IHR violations are increasing in the face of the COVID-19 crisis, and WHO is also not properly performing IHR management and supervision.

Among the IHR problems that have been continuously raised, COVID-19 highlighted: 1) the provision of notifications and information based on the evaluation of potential PHEICs, 2) the timing of WHO's PHEIC decisions and declaration, procedures and warning systems, 3) measures to respond to infectious diseases against IHR, 4) WHO's lack of funds. So we will focusing on the discussions of the WHO IHR Revision committee, this article examines the problems and improvement measures of the IHR (2005).

LIMITATIONS AND PROBLEMS OF COVID-19 AND THE IHR

WHO's revision of IHR (2005)

WHO recognized through SARS, which death 8,096 persons and made 774 patients in 29 countries in 6 months after the outbreak in 2003, that the cost of investment to prepare for infectious diseases in advance was less than the cost of tourism revenue and economic losses in the event of a fan pile of infectious diseases.

In response, the WHO revised the IHR in 2005 to encourage each country to prepare in advance to curb transmission of infectious diseases, but under the IHR (2005), the self-report evaluation of key competencies required by each country to submit to the WHO was 64 out of 100 points worldwide.

Meanwhile, as another tool to evaluate the implementation rate, national readiness has been evaluated according to the voluntary external joint evaluation process conducted by 98 countries so far, and the Global Health Security Index, an independent academic activity, also evaluated the country's infectious disease preparation.

Despite the WHO's prior preparations, less than 3 months after SARS-CoV-2 occurred in Wuhan, China, it declared a pandemic to block trade and exchanges at a time when it threatened the health of everyone around the world. Therefore, the WHO was fatally hurt by its authority and status as an international organization by misjudging the appropriate timing of the pandemic declaration and revealed its limitations as an international organization.

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Notice of COVID-19 outbreak to WHO

It is important to identify and contain new pathogens as soon as possible.

In the case of COVID-19, early detection and prompt action were taken, but the emergency committee withheld the declaration once because of a lack of understanding of the source of infection and hesitated to declare a pandemic to block transmission.

In December 2019, many pneumonia patients of unknown cause were hospitalized in Wuhan, China. As these pneumonia patients did not recover to general treatment, doctors sent samples of pathogens from pneumonia patients to the Wuhan Virus Research Institute on December 24. The Wuhan City Health Commission, which confirmed in an epidemiological investigation that 55%–66% of pneumonia patients visited the Huanan Seafood Market, urgently notified the hospital network on December 30, 2019, that an unknown case of pneumonia related to the Huanan Seafood Market occurred.

The seafood market was closed from December 31 to January 1, recognizing that there was a possibility, although no clear evidence was known at the time as to whether the new pathogen was transmitted between people.

Late in the afternoon of December 31, the Wuhan City Health Commission publicly announced 27 cases of unknown pneumonia and immediately reported them to the WHO World Health Organization Regional Office for the Western Pacific (WPRO)'s IHR Secretariat.

The limit of PHEIC

In IHR (2005), the WHO Secretary-General has the authority to convene a WHO IHR Emergency Committee meeting to hear advice and declare the PHEIC in the event of a global epidemic due to its strong transmission power.

The WHO IHR Emergency Committee meeting convened on January 22–23, 2020 was unable to reach a conclusion because it was not able to accurately grasp the outbreak and transmission of infectious diseases in China at the time, but the WHO declared PHEIC when 98 patients occurred in 18 countries on January 30, 2020. However, since travel restrictions were not included, immediate emergency responses could not be made in most countries.

Meanwhile, there is no term and definition of pandemic in IHR (2005), but COVID-19 was defined as a global pandemic by March 2020, when 118,000 cases of COVID-19 infection were reported worldwide.

The limitations of IHR (2005) stipulate that each country has the ability to detect and notify WHO of new infections, but in reality, it is not possible for all countries around the world to detect the substance of new infections exactly early and even identify their countermeasures and report them to WHO. In addition, despite the WHO's declaration of PHEIC on January 30, 2020, each country did not take travel restrictions or quarantine measures because it thought "wait" would be less socioeconomic than public health measures at a time when there was no certainty about how serious the outcome of the new pathogen was.

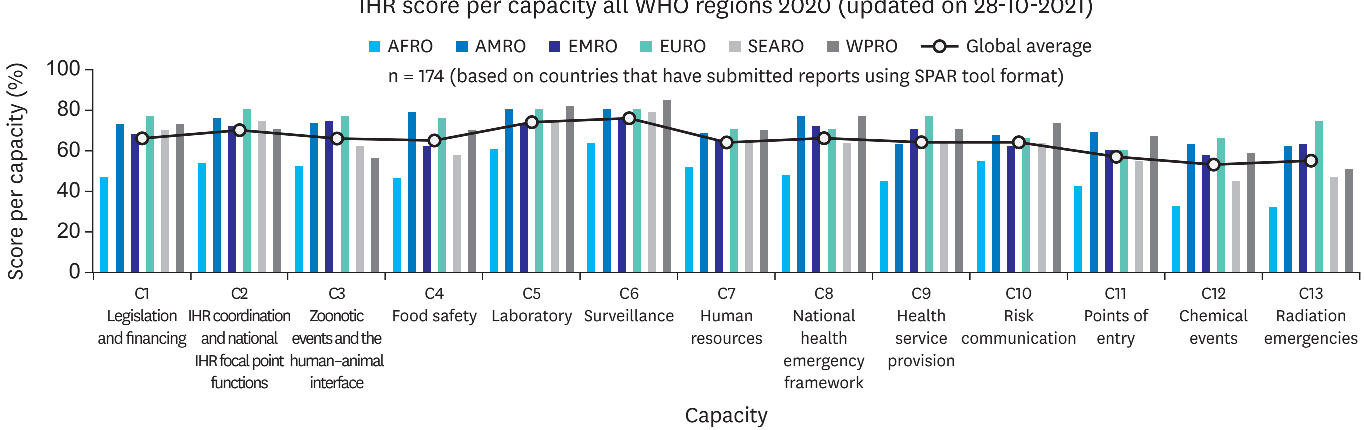

Fig. 1. IHR score per capacity all WHO regions 2020.
IHR = International Health Regulations; WHO = World Health Organization; AFRO = World Health Organization Regional Office for Africa; AMRO = World Health Organization Regional Office for the Americas; EMRO = World Health Organization Regional Office for the Eastern Mediterranean; EURO = European Region; WPRO = World Health Organization Regional Office for the Western Pacific; SPAR = State Party self-assessment annual reporting.

IMPROVEMENT PLAN FOR IHR 2005 DISCUSSED IN THE REVISION COMMUNITY

Compliance and authorization

Lack of compliance of State Parties with certain obligations under the IHR, particularly on preparedness, contributed to the COVID-19 pandemic becoming a protracted global health emergency.

In the IHR (2005), each country was equipped with the ability to respond to the public health crisis, and the competency evaluation was conducted annually. However, the average implementation rate of 174 countries submitted for the 2020 IHR implementation evaluation was only about 70%. Moreover, in the case of G20 countries, only 86% (**Fig. 1**).

In view of these implementation rates, countries with infectious diseases are far short of their ability to detect new infectious diseases early and inform countries of effective countermeasures. Therefore, the WHO-led infectious disease research center should be established, and pathogens of new infectious diseases should be sent for examination, and a system that can notify countries of information on this is needed.

Responsibility for implementing the IHR needs to be elevated to the highest level of government
The IHR (2005) is an international agreement to detect infectious diseases early and block the spread to other regions and countries.

However, the Convention on Biological Diversity which contradicts the provisions of the IHR, and its affiliated sentiment Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilization, or World Intellectual Property Organization (WIPO) and the World Trade Organization (WTO)'s Trade-Related Aspects of Intellectual Property Rights (TRIPS) so effectiveness cannot be guaranteed unless the IHR is stipulated as a special law signed by the leaders of the country.

An article 19 instrument under the WHO Constitution would be legally binding on States Parties that opt to ratify it and this legally binding status offers the potential for greater

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sustained attention, both political and normative, to the critical issue of a pandemic preparedness and response, than a non-binding act.

Therefore, documents must be signed so that the best decision-makers of each country can serve as a special law in the international community.

A robust accountability mechanism for evaluating and improving compliance with IHR obligations would strengthen preparedness, international cooperation, and timely notifications of public health events

COVID-19 pandemic has found a lack of legal leadership in writing to solve this problem in the face of an international health crisis.

The roles and responsibilities between the WHO, the International Monetary Fund (IMF), the World Bank, and the United Nations (UN) Secretary-General are unclear, so it needs to be adjusted.

The international cooperation system for the preparation and response of infectious diseases in each country should have the leaders of each country take responsibility, prepare for it, check its performance, evaluate it, and report its implementation to the WHO.

The IHR (2005) should bridge the gap in the ability to prepare and respond to infectious diseases by country, clarify responsibilities between the state and international organizations, and establish legal obligations and norms.

To this end, the WHO sets new and measurable goals and criteria for pandemic preparedness and ability to respond, and all countries are required to check and report the implementation rate to the WHO within 6 months.

In addition, the IMF and the World Bank will evaluate their economic policy response plans to prepare for infectious diseases.

Early warning, notification, and response

Early alert is essential for triggering timely action

PHEIC should serve as a clear request for emergency epidemic response worldwide, along with countries that should pay attention to the exact nature of the emergency and the potential threats it contains.

Meanwhile, when PHEIC is declared, it is more important not to impose unfair trade and travel restrictions except for movement restrictions for at least measures to block infectious diseases. Therefore, it is necessary to create a system that gives incentives to countries that report early warnings and countermeasures. To this end, the WHO should establish a new global system that allows information on pathogens around the world to be transparently reported to the center using state-of-the-art digital tools.

By analyzing the reported information, the WHO should provide clear guidance on what actions the country should take on the day it declares the PHEIC.

Early response requires better collaboration, coordination, and trust

Most countries have been seriously hit by unprotected exposure to fan piles. On the other hand, successfully managed countries sought scientific guidelines for new pathogens,

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cooperated with community health workers and community leaders, and involved marginalized people in decision-making. However, in countries that delay scientific knowledge, information distrust, and notification, society was confused because it failed to prevent the spread of COVID-19.

Therefore, building a resilient and equal society requires a change in mindset. COVID-19 response should recognize and respond to gender, ethnicity, and inequality.

To this end, national and local public health institutions should ensure multidisciplinary capabilities and participation in various civil societies and establish a decision-making system that reflects the opinions of society based on accurate and scientific knowledge and information.

Applying the precautionary principle in implementing travel-related measures would enable early action against an emerging pathogen with pandemic potential
Nationally, the cost of preparing for the fan dummy is less than the economic loss caused by the outbreak of infectious diseases. Some countries have an early warning system for infectious diseases through the experience of SARS and Middle East respiratory syndrome (MERS), recognizing the COVID-19 threat early and keeping the spread of infectious diseases small with rapid response.

The countries that took preventive measures were China, New Zealand, South Korea, Singapore, Thailand, and Vietnam, which responded to COVID-19 through a centralized governance structure.

The key measures were to classify suspected cases in a timely manner and provide designated quarantine facilities for those who could not self-isolate. Social and economic support was established to promote the widespread use of public health measures. Countries with good performance have transparently communicated with the government and community experts in various fields to take countermeasures. From these results, preparation for early warning is essential.

Funding and political pledges

Effective IHR implementation requires predictable and sustainable financing at both national and international levels
Funds to prepare for the pandemic are funds to ensure that poor countries could respond early. This is an important function of the international system to prepare for and respond to infectious diseases to bridge the gap.

To this end, in order to quickly and stably raise the necessary funds in the event of a pandemic, it must be able to spend $50 billion to $100 billion immediately, and $5 billion to $10 billion a year must be promised to donate for 10 to 15 years.

This fund must be secured separately from the existing Official Development Assistance (ODA) fund, which is flexibly configured to be paid in case of an emergency, although it is a principle to be paid according to a prepared response plan according to the expected scenario.

A new era of international cooperation is required to support IHR implementation better
COVID-19 Pandemic is strong evidence that health is not luxury, but human rights, also not unnecessary expenditure, but investment in the future, and investment in new drug development is the basis for social, economic, political stability and security.

Therefore, the WHO should ensure that mankind can jointly respond to new infectious diseases with the highest decision-making of 194 countries around the world in the field of international health.

CONCLUSION

The IHR Review Committee analyzed the occurrence and response process of COVID-19 and reviewed the measures to be improved in the IHR regulations in 3 main aspects.

First, in relation to compliance with regulations,

① Lack of compliance of State Parties with certain obligations under the IHR, particularly on preparedness, contributed to the COVID-19 pandemic becoming a protracted global health emergency.

② Responsibility for implementing the IHR needs to be elevated to the highest level of government.

③ A robust accountability mechanism for evaluating and improving compliance with IHR obligations would strengthen preparedness, international cooperation, and timely notifications of public health events.

Second, regarding early warning, notification, and response,

④ Early alert is essential for triggering timely action.

⑤ Early response requires better collaboration, coordination, and trust.

⑥ Applying the precautionary principle in implementing travel-related measures would enable early action against an emerging pathogen with pandemic potential.

And the third, funding and political pledges,

⑦ Effective IHR implementation requires predictable and sustainable financing at both national and international levels.

⑧ A new era of international cooperation is required to support IHR implementation better.

Such amendments were announced in 73rd WHA by the Chair of the Review Committee on Functioning of the IHR (2005).

After that, it was finally reported at 74th on May 31, 2021, and a special WHA meeting was held here in November 2021 to develop preparation and response for infectious diseases in WHO agreements, agreements, or other international documents.

The WHA recognized IHR (2005) as currently legally binding international law in Pandemic, proposed the establishment of an intergovernmental negotiating body, and decided to continue working to finally coordinate the revision of IHR (2005).

The world must now establish a system that allows mankind to cope with infectious diseases through one unified IHR international law, and jointly respond to global crises faced by mankind such as biodiversity and climate change and sustainable development.

Economic, information, and technological inequality triggered by COVID-19 calls for wise measures to resolve racial discrimination between regions. Now, joint efforts should be made to narrow the gap in rational inequality by accurately distinguishing and integrating the responsibilities between international organizations such as the UN and the WHO.

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