

Sustaining containment of COVID-19: global sharing for pandemic response

Hiroaki Mitsuya, Norihiro Kokudo

National Center for Global Health and Medicine, Tokyo, Japan.

Abstract: The coronavirus disease 2019 (COVID-19) outbreak, caused by SARS-CoV-2, has rapidly escalated into a global pandemic. One of our significant concerns is that we have no data as to whether people, who acquired immunity against this deadly virus and recovered from COVID-19, are protected from further infections with the same virus. Moreover, we have no data as to whether this pandemic will persist in our societies and continue vexing us for long periods of time. Implementing science-based response strategy is essential to sustain containment of COVID-19 globally. Rapidly sharing scientific information means providing real-time research data and relevant findings. As an international academic journal, *Global Health & Medicine* publishes this special issue entitled "*GHM Special Topic: COVID-19*". It includes a range of articles describing COVID-19 based on frontline data from Japan, China, the United States, Italy, the United Kingdom, and other countries and areas worldwide. Our hope is that the rapid publication and sharing of information contribute, in whichever possible way, to this global fight against COVID-19.

Keywords: SARS-CoV-2, COVID-19, global health

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a newly emerging pathogen, and it highly contagious and propagates quickly. The coronavirus disease 2019 (COVID-19) outbreak, caused by SARS-CoV-2, has rapidly escalated into a global pandemic. Globally, as of 26 April 2020, there have been 2,804,796 confirmed cases of COVID-19, including 193,710 deaths, reported to the World Health Organization (WHO) (1), and these figures are still rapidly increasing (Figure 1). Even more concerning is that there is currently no evidence that people who have recovered from COVID-19 and who have antibodies are protected from second infection (2). "We have a long way to go. This virus will be with us for a long time" (3), as indicated by Dr. Tedros Adhanom Ghebreyesus, WHO Director-General, at a media briefing on COVID-19 held on 22 April 2020.

Among the countries that have reported data to WHO, 78% have a preparedness and response plan in place; 76% have surveillance systems in place to detect cases; and 91% have the capacity to laboratory test for COVID-19. However, only 66% of the countries have clinical referral system in place to care for patients with COVID-19; only 48% have community engagement plan; and only 48% have infection prevention and control programs and standards for water, sanitation, and hygiene in healthcare facilities (3).

Implementing the science-based response strategy is essential to achieve and sustain global containment of

COVID-19. Rapid share of scientific information means the provision of real-time guidance to epidemiologists working to contain the outbreak, clinicians managing patients, and modelers helping to understand future developments and the possible effectiveness of various interventions. Facing the unprecedented threat by COVID-19, the scientific community has rapidly come together to address this outbreak in an open and collaborative manner to support the global response to this outbreak by rapidly sharing and highlighting research data and relevant findings (4).

Since its inception in October 2019, our journal – *Global Health & Medicine* – has been dedicated to publishing high-quality original research that contributes to the advancement of global health and medicine, with the goal of creating a global information network for global health, basic sciences as well as clinical sciences, hoping that they lead to novel clinical applications (5). At the Journal, we have worked with authors to publish this special issue on the topic of COVID-19 in a determined effort to rapidly disseminate reliable information to promote science-based response strategy to combat this global pandemic.

This issue of "*GHM Special Topic: COVID-19*" includes a range of articles describing COVID-19. This issue has three features. First, it has collected frontline data on the COVID-19 fight in Japan, including the triple challenges of (i) a cruise ship docked at Yokohama, (ii) evacuation of Japanese nationals from Wuhan,

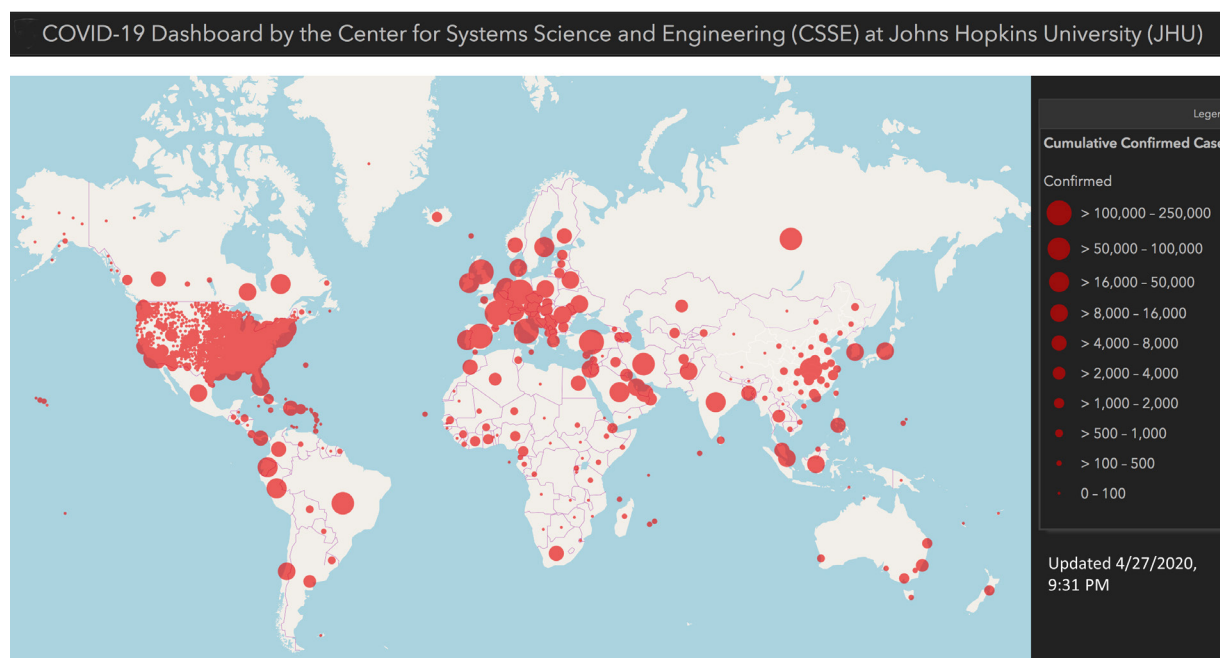


Figure 1. Globally reported confirmed cases of COVID-19 as of April 27, 2020. (Data source: <https://coronavirus.jhu.edu/map.html>).

China, and (iii) an increasing number of domestic cases. Jimi (Parliamentary Vice-Minister of Health, Labour and Welfare) and Hashimoto (State Minister of Health, Labour and Welfare) describe the anchorage quarantine approach and the principles of quarantine measures implemented on the cruise ship *Diamond Princess*. Tsuboi *et al.* report the epidemiology and quarantine measures implemented during the outbreak of COVID-19 on the cruise ship. Hayakawa *et al.* report the quarantine process and results of SARS-CoV-2 infection among returnees to Japan on five charter flights from Wuhan, China. Inoue described the health policy factors relatively unique to Japan in combating COVID-19. Kuwahara *et al.* analyzed the publicly available data on patient characteristics of COVID-19 in Tokyo. Edagawa *et al.* describe the epidemiological features of COVID-19 after declaration of an emergency in Hokkaido and they report 15 cases, including 3 cases requiring mechanical ventilation. Umeda *et al.* describe the nursing care for patients with severe COVID-19 on extracorporeal membrane oxygenation (ECMO) support. Ito *et al.* summarize the major clinical trials of COVID-19 treatments underway and studies currently being conducted or scheduled in Japan.

Second, this issue presents the valuable experiences and lessons learned during the early phases of the fight against the COVID-19 outbreak worldwide. Xu *et al.* describe the main contents of the 3rd to 7th versions of guidelines for the diagnosis and treatment of COVID-19 in China. He *et al.* describe the role and activities of Internet-based healthcare platforms designed for COVID-19 in China. Villa *et al.* describe the response to pandemic in Italy and emphasize that action against

this threat must be taken quickly, firmly, and at highest trans-national levels. Kariya reports the rapid spread of COVID-19 in New York and the response of the community. Kutsuna summarizes advances in research and clinical practice regarding COVID-19 based on reported studies worldwide.

Third, a "World Report Series" is featured in this issue to share the actual experiences of frontline clinicians and other healthcare professionals around the world fighting the pandemic. The current status of COVID-19 in places like the United States, the United Kingdom, China, West Africa, Cambodia, and Myanmar is reported in order to be a useful reference for the next phases of the COVID-19 response.

As the COVID-19 pandemic progresses, rapidly sharing scientific information will be crucial to determining science-based response strategy to mitigate and suppress, and thus to better prepare for the probable continuation of the epidemic over the next few years or longer. As an international academic journal, *Global Health & Medicine* will continue to rapidly review and publish COVID-19-related articles to facilitate the real-time sharing of scientific information. It is our hope that this form of sharing contributes, in whichever possible way, to this global fight against COVID-19.

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*Address correspondence to:
Hiroaki Mitsuya and Norihiro Kokudo. *Global Health & Medicine*. National Center for Global Health and Medicine, 1-21-1 Toyama Shinjuku-ku, Tokyo 162-8655, Japan.
E-mail: office@globalhealthmedicine.com