Global Health & Medicine. 2022; 4(2):64-66.

EDITORIAL

DOI: 10.35772/ghm.2022.01036

COVID-19 in Japan: An update on national policy, research, clinical practice, and vaccination campaign

Peipei Song, Hiroaki Mitsuya*, Norihiro Kokudo*

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

Abstract: As countries worldwide take steps such as vaccination campaigns to combat the COVID-19 pandemic, academia is actively promoting the timely sharing of scientific information across borders. As an international academic journal, *Global Health & Medicine* (GHM) has quickly accepted COVID-19-related papers and published results of series of studies since the beginning of 2020. In particular, the "First Special Issue on COVID-19" (April 2020) and the "Second Special Issue on COVID-19" (April 2021) included a wide range of articles presenting frontline data on the COVID-19 response in Japan, China, the United States, Italy, the United Kingdom, West Africa, and other various countries and areas worldwide. This "Third Special Issue on COVID-19" (April 2022) features the practical experiences of front-line clinicians, researchers, and other healthcare professionals from Japan and it presents updated data on *i*) national policy, *ii*) research, *iii*) clinical practice, and *iv*) the vaccination campaign. Our hope is that the rapid publication and sharing of information will help, in any way possible way, in the global fight against COVID-19.

***Keywords*:** COVID-19, SARS-CoV-2, vaccination, Omicron, BA.2 subvariant, XE subvariant, Japan

Japan has experienced six waves of the COVID-19 pandemic so far since the first domestic case of COVID-19 transmission was reported on January 16, 2020 (Figure 1). As of April 25, 2022, Japan had reported a cumulative total of 7,660,012 infected people and 29,308 deaths (*1*).

Japan's basic policy on COVID-19 is to curb the outbreak of infection, maintain the medical system, and focus on dealing with the severely ill. One of the most important response strategies, states of emergency, were declared four times, three of which were declared in 2021. During this period, Japan hosted the Tokyo 2020 Olympic (July 23-August 8, 2021) and Paralympic (August 24-September 5, 2021) Games, and began a massive vaccination campaign. As of April 25, 2022, the total number of vaccine doses administered has reached 268,822,890. Nationwide, 81.4% of the total population has received the first dose of the vaccine, 80.0% has received the second dose, and 50.8% has received the third dose (*2*).

As countries worldwide took steps such as vaccination campaigns to combat the COVID-19 pandemic, academia actively promoted the timely sharing of scientific information across borders. Indeed, facing with an unprecedented threat from COVID-19, the scientific community responded quickly to the outbreak by assisting the world by rapidly sharing research data and relevant findings (*3,4*). Such scientific information includes the route of transmission, transmissibility, history of human infection, effective clinical methods of managing at-risk populations and patients, laboratory information necessary to diagnose patients, and genetic sequencing information to assess virus stability.

Since its inception in October 2019, our journal – *Global Health & Medicine* (GHM) – 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, and clinical sciences in the hope that they lead to novel clinical applications. Since its third issue (February 2020), GHM has quickly accepted COVID-19-related papers and published the results of many studies. In particular, the "First Special Issue on COVID-19" (April 2020) and the "Second Special Issue on COVID-19" (April 2021) included a wide range of articles presenting frontline data on the COVID-19 response in Japan, China, the United States, Italy, the United Kingdom, West Africa, and various countries and areas worldwide (Figure 2).

This "Third Special Issue on COVID-19" (April 2022) features the actual experiences of frontline clinicians and other healthcare professionals from Japan and it presents updated data on *i*) national policy, *ii*) research, *iii*) clinical practice, and *iv*) the vaccination campaign.

With respect to national policy, Dr. Ohmagari summarized the measures taken by the Tokyo Metropolitan Government in response to COVID-19 and

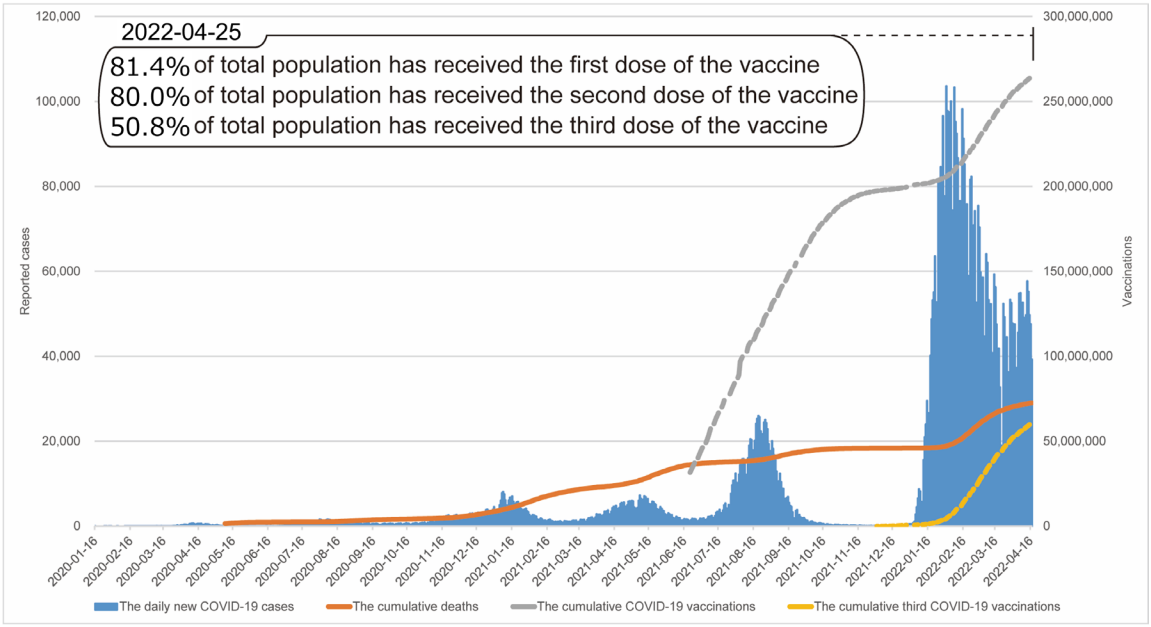

Figure 1. Number of reported COVID-19 cases and the vaccination campaign in Japan from 2020-2022. Data source: *https://www.mhlw.go.jp/stf/covid-19/open-data.html, https://www.kantei.go.jp/jp/headline/kansensho/vaccine.html*

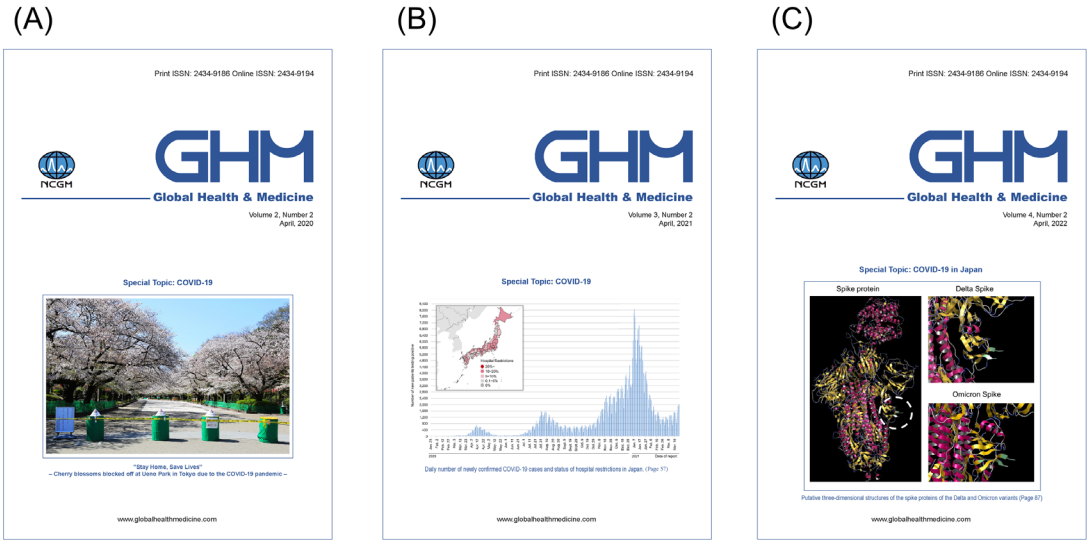

Figure 2. Series of special issues regarding COVID-19 published by *Global Health & Medicine*. (A) "First Special Issue on COVID-19" (April 2020), **(B)** "Second Special Issue on COVID-19" (April 2021), and **(C)** "Third Special Issue on COVID-19" (April 2022). The full articles are available from *http://globalhealthmedicine.com/site/archives.html*

he called for continued active maintenance of the health care system and the minimization of deaths, while normalizing social interactions. Akashi *et al.* presented their experience and implementation strategies to set up a "care and isolation facility" for mild COVID-19 cases in Tokyo by using existing hotels. Machida *et al.* described important national strategies, including legal measures by the government, infection control in high-risk areas, vaccine rollout, and prioritized hospitalization for high-risk patients in critical condition.

With respect to research, Ishizaka *et al.* reviewed the current status of "long COVID" in Japan and understanding of its molecular background. In addition, the feasibility of vaccination as a treatment for patients with long COVID was fully discussed.

With respect to clinical practice, Dr. Katagiri summarized the lessons learned for safe and adequate blood purification therapy in severe COVID-19. Tomidokoro *et al.* described the relationship between COVID-19 and cardiovascular diseases and its drastic consequences for Japanese patients in clinical settings. Minamimoto *et al.* analyzed the changes in the circumstances of cancer diagnoses during the COVID-19 pandemic in Tokyo, Japan, which they surmised based on FDG-PET/CT for cancer patients. The authors indicated that "the number of patients

receiving FDG-PET/CT in Tokyo was influenced by the COVID-19 epidemic; staging based on FDG-PET/CT had shifted to more advanced stages during the pandemic compared to that in pre-pandemic". Soh *et al.* shared their clinical experiences as emergency physicians performing endotracheal intubation for patients with COVID-19. Sekihara *et al.* analyzed the prognosis of Japanese patients with severe COVID-19 admitted to infectious disease intensive care unit during the pandemic caused by the Delta variant. Saito *et al.* described the clinical characteristics of and threshold cycle (Ct) values for the first 11 patients infected with the SARS-CoV-2 Omicron variant in Japan.

With respect to vaccination campaign, Nomoto *et al.* analyzed the impact of prioritized vaccinations for the elderly on the COVID-19 pandemic in Japan. Seto *et al.* emphasized the importance of promoting the proper use of anti-SARS-CoV-2 drugs and SARS-CoV-2 vaccines by hospital pharmacists and establishment of an adverse drug reaction reporting system. Matsumoto *et al.* reported the adverse reactions to and attitudes toward vaccines among young populations one month after receiving the second dose of mRNA-1273 in Japan. Dr. Ujiie emphasized the necessity of establishing an emergency regulatory approval system in Japan in response to the COVID-19 pandemic and challenges in developing domestically produced vaccines.

Although the past six waves of the pandemic in Japan have been relatively effectively contained nationwide, the uncertainty of the blow by the new Omicron variant and a potential seventh wave of the pandemic represent additional challenges in the immediate future. There are fears that as the highly infectious Omicron BA.2 (*5*) becomes mainstream, there will be even more infected people than during the past waves. In addition, Japan's first case of infection with the Omicron XE strain – a combination of the BA.1 and BA.2 subvariants, with a higher rate of infection than BA.2 subvariant – was also detected in a woman in her 30s who arrived at Narita Airport from the United States on March 26, 2022 (*6*).

Globally, national measures including vaccination campaigns, border quarantine, and domestic surveillance of mutant strains may continue in our combat with COVID-19. It is of note, however, that the requirement of mask wearing is being lifted in a number of countries and areas worldwide and no immediate increase of SARS-CoV-2-infected individuals has been seen in many such areas. In fact, the Centers for Disease Control and Prevention ruled that approximately 7 in 10 no longer need to wear masks in indoor public areas based on new guidance, as of April 25, 2022. On the other hand, there are surges in the numbers of newly infected in the US and other areas, prompting healthcare officials to re-expand recommendations to wear masks indoors in public spaces. Although we are to receive mixed signals in recommendations in the immediate future, it is obviously critical for us to stay vigilant on scientifically well-determined outcomes.

As an international academic journal, GHM will continue to work with authors to publish academic articles regarding COVID-19 in a determined effort to rapidly disseminate reliable information to promote science-based responses to combat this global pandemic.

Funding: None.

Conflict of Interest: The authors have no conflicts of interest to disclose.

References

1. Ministry of Health, Labour and Welfare. Current status of COVID-19 and the response to it by the Ministry of Health, Labour and Welfare (April 25, 2022 edition). *https://www.mhlw.go.jp/stf/newpage_25269.html* (accessed April 26, 2022). (in Japanese)
2. Prime Minister's Office of Japan. The new COVID-19 vaccine. *https://www.kantei.go.jp/jp/headline/kansensho/vaccine.html* (April 25, 2022 edition). (accessed April 26, 2022). (in Japanese)
3. Mitsuya H, Kokudo N. Sustaining containment of COVID-19: Global sharing for pandemic response. Glob Health Med. 2020; 2:53-55.
4. Song P, Karako T. Scientific solidarity in the face of the COVID-19 pandemic: Researchers, publishers, and medical associations. Glob Health Med. 2020; 2:56-59.
5. Yu J, Collier AY, Rowe M, Mardas F, Ventura JD, Wan H, Miller J, Powers O, Chung B, Siamatu M, Hachmann NP, Surve N, Nampanya F, Chandrashekar A, Barouch DH. Neutralization of the SARS-CoV-2 Omicron BA.1 and BA.2 variants. N Engl J Med. 2022 Mar 16. doi: 10.1056/NEJMc2201849.
6. National Institute of Infectious Diseases. About the recombinant Omicron strain. *https://www.niid.go.jp/niid/ja/2019-ncov/2551-cepr/11073-cepr-b11529-re.html* (accessed April 16, 2022). (in Japanese)

Received April 20, 2022; Revised April 26, 2022; Accepted April 27, 2022.

**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