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LETTER

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International technical cooperation to low- and middle-income countries during the COVID-19 pandemic

Toyomitsu Tamura*, Nobuaki Inoue, Hitoshi Murakami

Bureau of International Health Cooperation, National Center for Global Health and Medicine, Tokyo, Japan.

Abstract: This paper reports on the current status of international technical cooperation, reflecting the views of the Bureau of International Health Cooperation of the National Center for Global Health and Medicine (NCGM) during the COVID-19 pandemic. To appropriately respond to the pandemic, the need for assistance to low- and middle-income countries has increased. Since 2020, there has been a shift from on-site to online international technical cooperation to avoid human contact. While online solutions increased the number of participants in international conferences and training, business travel costs and time were reduced. However, it became necessary to consider not only effective labor-management practices to enable participation in meetings held in different time zones but also quicker ways to develop online training materials, which took a long time. In the future, a hybrid format combining offline and online international technical cooperation will become mainstream.

***Keywords*:** COVID-19, global health, international technical cooperation, low- and middle-income countries, online training

The Bureau of International Health Cooperation (BIHC) of the National Center for Global Health and Medicine (NCGM) has been engaged in global health issues since 1986 in collaboration with many domestic and international organizations (*1*). It plays several roles, including dispatching Japanese experts who provide technical support mainly to low- and middle-income countries, conducting interventions at international conferences as members of the Japanese government delegation to set global health norms, generating evidence from field experiences, developing human resources both in low- and middle-income countries and Japan, and promoting Japan's healthcare technology and services in low- and middle-income countries.

Owing to the recent increase in international mobility, infectious diseases such as COVID-19 can quickly spread worldwide. This provides an opportunity to reaffirm the importance of international technical cooperation. COVID-19 has plunged the world into a health crisis. However, this crisis has caused us to recognize the importance of international technical cooperation (*2*). The COVID-19 pandemic has forced us to recognize the necessity of understanding and solving the problems of all people globally without being bound by the framework of international technical cooperation implemented between low- and middle-income countries and high-income countries. The European Union has claimed that this health crisis is transforming the international system and regional order (*3*). Thus, the COVID-19 pandemic has provided an opportunity to reconsider the relationship of economic cooperation between countries.

According to the World Health Organization (WHO), as of 27th July 2022, there were 486.1 million confirmed cases of COVID-19 in high to upper middle-income countries compared to 81.2 million cases in lower middle- and low-income countries (*4*). Clinical and public health responses to COVID-19 in high and upper middle-income countries, such as avoiding enclosed spaces, crowded people, and close person-to-person contact, *etc*., could serve as valuable experiences for low- and middle-income countries (*5-7*). Despite high-income countries also being affected by COVID-19, BIHC is continuing its international technical cooperation.

In the past, BIHC's international technical cooperation was mainly based on fieldwork. In 2019, we dispatched 347 experts for technical assistance and 53 attendees in international conferences, all of which were conducted on-site. Training for health personnel in low- and middle-income countries has generally been conducted through visits by trainees from low- and middle-income countries to Japan or dispatchments of Japanese trainers to low- and middle-income countries. A total of 332 trainees from low- and middle-income countries participated in the trainings conducted by BIHC in 2019 (Figure 1).

However, the COVID-19 pandemic has made such trainings difficult due to the restrictions enforced to avoid human contact. In response to these challenges,

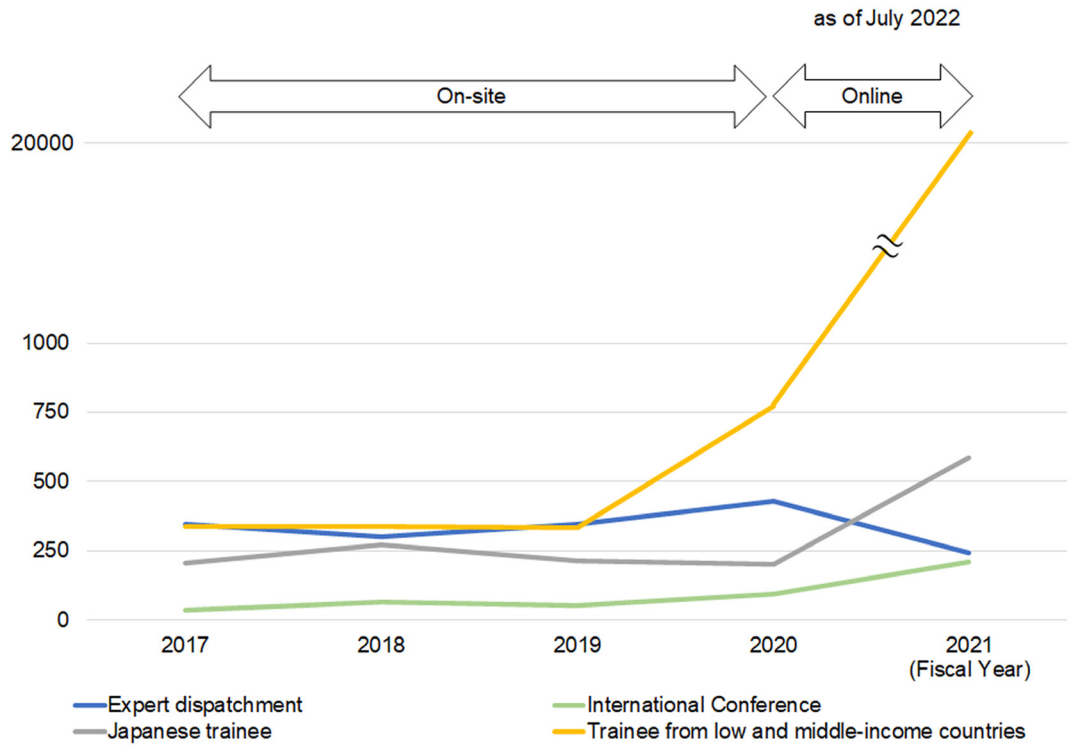

Figure 1. Number of participants involved in international technical cooperation conducted by BIHC during 2017-2021.

information and communications technology, such as online meetings, conferences, and training, has advanced rapidly around the world, with the BIHC also adopting such technology. After the outbreak of the COVID-19 pandemic, 428 and 241 Japanese experts provided technical assistance for thirteen countries, namely Democratic Republic of the Congo, Independent State of Papua New Guinea, Kingdom of Cambodia, Lao People's Democratic Republic, Malaysia, Mongolia, People's Republic of China, Republic of Indonesia, Republic of Senegal, Republic of the Philippines, Republic of the Union of Myanmar, Republic of Zambia and Socialist Republic of Viet Nam in 2020 and 2021, respectively, and 94 and 211 experts participated in international conferences in 2020 and 2021, respectively, all of which were conducted online (Figure 1). The ability to easily participate in online meetings has resulted in an increase in the number of participants in international conferences. This strategy emerged as the most accessible means of participating in the meeting (*8,9*). We were also able to reduce the amount of time and expenses we spend on international business trips. However, the opportunity to contribute by offering technical assistance and participating in international conferences, which were held at midnight Japan standard time due to different time zones, created an unprecedented challenge related to the labor-management of BIHC members.

Prior to COVID-19, our institute received a maximum of 433 trainees from low- and middle-income countries annually, which increased to 773 and 20,236 in 2020 and 2021, respectively, when we shifted to online training. The number of Japanese participants who aspire to be involved in international technical cooperation also increased from approximately 230 to 585 in 2021 (Figure 1). Online training enabled us to increase the number of trainees significantly. However, creating materials for online training was time-consuming. Hameed *et al*. and Kim *et al*. highlighted the importance of considering factors related to learners and educators, content and resources, educator-learner interactions, quality of operational strategies, and learning environment (*8,9*). Given this worldwide trend, we face the challenge of developing effective online training methodologies and assessment tools that can find application in global health.

In the future, certain activities should be conducted offline. However, a hybrid format combining offline and online meetings, conferences, and training for international technical cooperation is likely to become mainstream, especially since online cooperation can yield results while greatly reducing the time and expense of international business trips.

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References

1. Bureau of International Health Cooperation, National Center for Global Health and Medicine. Annual report in 2020. *https://kyokuhp.ncgm.go.jp/library/annual/2020/2020annual_report_light_ALL.pdf* (accessed July 27, 2022).
2. Kokudo N, Sugiyama H. Call for international cooperation and collaboration to effectively tackle the COVID-19 pandemic. Glob Health Med. 2020; 2:60-62.
3. Bergner S. The role of the European Union in global health: The EU's self-perception(s) within the COVID-19 pandemic. Health Policy. 2021; S0168-8510(21)00254-2.
4. World Health Organization. WHO Coronavirus (COVID-19) Dashboard. *https://covid19.who.int/table* (accessed July 27, 2022).
5. Kumanan T, Rajasooriyar C, Guruparan M, Sreeharan N. The impact of COVID-19 on the delivery of critical health care: Experience from a non–high-income country. Asia Pac J Public Health. 2020; 32:473-475.
6. Liu X, Kortoçi P, Motlagh NH, Nurmi P, Tarkoma S. A survey of COVID-19 in public transportation: Transmission risk, mitigation and prevention. Multimodal Transportation. 2022; 1:100030
7. Royo-Bordonada MA, García-López FJ, Cortés F, Zaragoza GA. Face masks in the general healthy population. Scientific and ethical issues. Gac Sanit. 2021; 35:580-584.
8. Hameed BZ, Tanidir Y, Naik N, Teoh JY, Shah M, Wroclawski ML, Kunjibettu AB, Castellani D, Ibrahim S, da Silva RD, Rai B. Will "hybrid" meetings replace face-to-face meetings post COVID-19 era? Perceptions and views from the urological community. Urology. 2021; 156:52-57.
9. Kim SH, Park S. Influence of learning flow and distance e-learning satisfaction on learning outcomes and the moderated mediation effect of social-evaluative anxiety in nursing college students during the COVID-19 pandemic: A cross-sectional study. Nurse Educ Pract. 2021; 56:103197.

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**Address correspondence to*:
Toyomitsu Tamura, Bureau of International Health Cooperation, the National Center for Global Health and Medicine, 1-21-1, Toyama, Shinjuku, Tokyo 162-8655, Japan.
E-mail: t-tamura@it.ncgm.go.jp