Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Research collaboration is needed to inform quarantine policies for health-care workers

Evidence is weak on global policies and guidelines regarding quarantine and testing measures for vaccinated health-care workers (HCWs) who might have been exposed to patients with COVID-19. Recurring outbreaks have constrained the number of available HCWs, particularly in low-income and middle-income countries (LMICs). We urge the international community to support development of evidence and evidence-based recommendations on this issue.

HCWs face routine and substantial risk of SARS-CoV-2 infection. Many countries have therefore prioritised HCWs for COVID-19 vaccination; however, the vaccines available are not 100% effective,[1] and much remains unknown. Vaccination breakthrough infections and onward transmission among HCWs have been reported.[2] We note that many LMICs will not fully immunise their populations in 2021, leaving the general public at risk of repeated outbreaks and HCWs at risk of exposure. Policy makers must decide whether and how long to quarantine HCWs exposed to COVID-19, how often to test HCWs, and if testing should depend on the presence of symptoms. Evidence and recommendations are needed to help reduce risks to patients, HCWs, and their families.

In early May, 2021, eight community hospitals in Thailand were temporarily closed because their HCWs, many of whom had been fully vaccinated, were required to quarantine for 14 days.[3] We did a rapid review on this issue for the Thai Ministry of Public Health. To date, only the US Centers for Disease Control and Prevention has released a formal guideline specifically for vaccinated HCWs, which largely depended on the presence of symptoms.[4] Similar policies have been informally adopted in Malaysia and in the Indian state of Odisha, but most countries maintain the same policy regardless of vaccination status. It is unclear whether such guidelines are based on evidence, or if they can be adopted by countries with different profiles, including type of vaccines used, vaccination coverage, local infection rates, and presence of variants of concern.

Differential quarantine and testing policies for vaccinated HCWs are becoming increasingly important for many countries with overstretched health-care systems, such as India, Nepal, Brazil, and Thailand. A study of HCWs that considers vaccination status, vaccine type or brand, and their effectiveness, and that takes into account new variants, is warranted. Such research could help individual countries develop optimal quarantine and testing strategies that minimise risks while meeting health-care demands.

As several LMICs have fully vaccinated their HCWs, research-informed policy recommendations might be possible by use of data from LMICs alone. However, given the urgency of this issue, we call for solidarity from the global scientific community to research and generate evidence to inform quarantine policies for vaccinated HCWs, similar to that shown for COVID-19 treatments in the Solidarity Trial.

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For **COVID-19 vaccination tracking** see https://ourworldindata.org/covid-vaccinations

For more on the **Solidarity Trial** see https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov/solidarity-clinical-trial-for-covid-19-treatments

See Online for appendix

Delayed COVID-19 vaccine roll-out in Japan

To control the COVID-19 pandemic, high COVID-19 vaccination coverage is urgently needed in each country worldwide. According to Our World in Data COVID-19 vaccination tracking, by the end of April, 2021, the proportion of individuals who had received at least one dose of vaccination was 62% in Israel, 51% in the UK, 43% in the USA, and 28% in Germany. However, this proportion was quite low in other countries, such as Russia (8%) and South Korea (7%). Although Japan is preparing to host the Summer Olympic Games in Tokyo, only 4% of the population had been vaccinated as of May 21, 2021, according to the Our World In Data vaccination dashboard (appendix).

Such a delay in vaccine roll-out in Japan can be attributed to the following three factors. First, the regulatory approval of COVID-19 vaccines in Japan has lagged behind other countries. Although Japan

approved the first mRNA vaccine by Pfizer–BioNtech on Feb 14, 2021, which was the only available vaccine in the country as of April, 2021, there were several months of delay in approval compared with other high-income countries due to the regulatory requirement for a domestic clinical trial involving Japanese citizens and its own review process.[1] Because the number of patients with COVID-19 has been smaller in Japan than in other countries, Japan has been unable to register into international clinical trials to prove vaccine efficacy. As such, as of April, 2021, other vaccine products were still under review or investigation in ongoing clinical trials, and changes in regulations for vaccine approvals are being considered after criticism.

Second, there has been a delay in vaccine importation. Although Japan made contracts with Pfizer–BioNtech to import 194 million doses of vaccine by the end of 2021, it has encountered several obstacles, such as the temporary halt in production lines and EU approval for exports. Overall, only 28 million doses had been imported by the end of April, 2021.

Third, the vaccine roll-out system has been insufficient for achieving mass vaccination. Less than 15% of imported doses have been used so far. In Japan, only nurses and medical doctors can legally vaccinate citizens, so many local governments responsible for the vaccine roll-out have struggled to hire enough qualified personnel. Usually in medical institutions, primary care doctors deliver vaccinations individually; however, their capacity is limited because they also need to offer other medical care as usual. Given that converting large public spaces into vaccination sites and recruiting enough staff are crucial for mass vaccination,[2] the government has launched mass vaccination sites with the help of medical professionals belonging to the Self Defense Forces and other temporary staff.

According to the Prime Minister's Office of Japan, of the 3·85 million vaccinations delivered in Japan by the end of April, 2021, 94% (3·62 million) were for health-care workers; however, only around 22% (1·04 million) of these workers have received the second dose. It should be noted that slow roll-out could cause an emergence of new mutants.[3] Although the government plans to complete the vaccination of 36 million older citizens (aged ≥65 years) by the end of July, 2021, it is necessary to devise innovative ways to solve these setbacks to achieve this ambitious goal as soon as possible.

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A call to action on UHC commitments

Global health is at an extraordinary moment. The COVID-19 pandemic has exposed all the inequities that prevent achieving health for all. At the same time, the pandemic has given countries the opportunity to rebuild health systems differently, and the determination to ensure that bridges are built across geographies and sectors in doing so. This task will only be successful if everyone—communities and civil society, governments, multilateral organisations, philanthropists, and the private sector—does their part.

To end this crisis and build a healthier future, the world should act urgently in three linked areas: equitable access to COVID-19 tools, preparedness for future emergencies, and universal health coverage (UHC). To this end, we call on global leaders to mobilise political will, commit additional financing, and take collective action, and we note several unprecedented opportunities for the G7, G20, and UN to show their resolve to secure political commitment and action for stronger global governance and investment in stronger health systems.[1]

Although it is quite clear that UHC is an urgent priority to end the current global health crisis, the question and reality is this: are countries stepping up to the challenge of taking action on their UHC commitments?

As newly elected co-chairs of UHC2030, we are committed in driving this global multistakeholder collaboration forwards to reach its maximum potential. However, we are strongly aware that global initiatives must be closely linked and engaged with both national and local circumstances in order to be effective. We will endeavour to work with all our partners to help to turn political commitments to UHC into action on the ground and focus on linkages and interaction with implementation processes at the national level, which involve review by the legislative and executive branches of government.

On Sept 23, 2019, world leaders endorsed the most ambitious and comprehensive political declaration on health in history.[2] Their commitment to UHC was loud and clear. But are governments taking action towards meeting these commitments?

To try to answer this question and support national accountability and advocacy processes, UHC2030 produced the first review documenting the state of commitment to UHC at the end of

For the **vaccination rollout in Japan** see https://www.kantei.go.jp/jp/headline/kansensho/vaccine.html

For more on **UHC2030** see www.uhc2030.org

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