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

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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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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



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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