

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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. surgical masks instead of N95 masks should have been considered.

Finally, the authors suggested that all transcription-mediated amplification (TMA)-positive individuals in the intervention group were detected from among previously infected individuals who were not considered infectious. The analytical sensitivity of TMA is high, and it can confirm the presence of the SARS-CoV-2 genome in human specimens even when it is not detected by RT-PCR.⁵ Furthermore, 8 days after the event, there were neither Aq-RDT nor RT-PCR positive results in the intervention group. These facts indicate that no infectious participants in the intervention group slipped through the Aq-RDT screening test, and it would be an overstatement to say that strict controls prevented the spread of the infection.

I declare no competing interests.

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Authors' reply

We appreciate the interest of Tatsuya Fujikawa in our open-label randomised study on SARS-CoV-2 transmission prevention in an indoor mass-gathering, live-music event.¹

Fujikawa wonders if people attended the concert in groups or entry was permitted only on an individual basis. Study participants were randomly assigned (1:1) to either enter the indoor live event (experimental group) or not enter the event and return to normal life (control group).¹ Randomisation was performed through a computergenerated block randomisation (REDCap module) and was stratified by age, gender, and previous COVID-19 episode. Therefore, couples or small groups of friends were split through randomisation.

Regarding the use of N95 masks instead of standard surgical masks, this study was the first time that an indoor mass-gathering-event study was allowed during the COVID-19 pandemic with no physical distancing. So, we were obliged to err on the side of caution. In addition, price differences for a single use were not relevant in Europe. All participants wore the facial mask indoors, and that was specifically controlled by the security concert crew. No one reported difficulty in breathing when singing or dancing. So, the study was performed under real-life conditions as much as possible, and the measures undertaken effectively prevented indoor SARS-CoV-2 transmission.

As Fujikawa says, transcriptionmediated amplification (TMA) is extremelly sensitive and can remain positive for weeks or even months following COVID-19 cure. Rapid antigen tests and viral cultures were able to rule out potentially infectious individuals with transmission potential among those with positive TMA tests.

We have used the same protocol of measures in a second non-randomised study with 4992 participants.² Using data from the centralised epidemiological surveillance system from the Catalan Public Health Department, we confirmed that there were no excess COVID-19 cases diagnosed during the subsequent 14 days after the indoor concert among concert attendees.

Finally, in a third open-label, randomised, non-inferiority study performed in another large, live, indoor gathering in Paris, France, 6678 participants were randomly allocated in a 2:1 ratio to the experimental group (attendees) or to the control group (non-attendees).³The authors used our same list of measures but allowed a negative rapid antigen diagnostic test performed up to 3 days before the indoor concert (we did it in the same day) and standard surgical masks. The study met the non-inferiority criterion for the primary endpoint: number of patients SARS-CoV-2positive by RT-PCR test on self-collected saliva 7 days post-gathering in the perprotocol population.

All these data suggest that the implementation of same-day antigen rapid diagnostic test screening, use of face masks, and improved ventilation can prevent high rates of SARS-CoV-2 transmission in indoor mass-gathering live concerts without physical distancing under real-life conditions.

We declare no competing interests.

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Pertussis vaccination in Chinese children with increasing reported pertussis cases

In their Article, Juliette Paireau and colleagues¹ mentioned that a change