

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. Contents lists available at ScienceDirect



International Journal of Infectious Diseases



journal homepage: www.elsevier.com/locate/ijid

Letter to the Editor

Correspondence on "The Low Yield of SARS-CoV-2 Rapid Antigen Testing in Screening Asymptomatic Hospital Visitors in Low-incidence Settings"

ORCID: 0001-6428-9999

To the Editor,

We note the interest by Boddeti et al. (Boddeti et al., 2022) in our article that reported the use of rapid-antigen detection (RAD) in screening asymptomatic hospital visitors for SARS-CoV-2 at the point-of-entry during the COVID-19 pandemic (Wee et al., 2022).

During the study period 0.3% (31/9679) of admitted inpatients tested positive for COVID-19. In contrast, retrospective contact tracing together with RAD testing for visitors staying \geq 30 minutes identified COVID-19 cases among <0.01% (6/72605) of hospital visitors. In June 2021, Singapore was at Level 1 of the US Centers for Disease Control and Prevention (CDC)'s Travel Health Notice Thresholds (CDC, 2020), with an incidence of <50 cases of COVID-19 over the past 28 days per 100,000 population. Singapore raised to Level 3 only at the end of September 2021 (100-500 cases over the past 28 days per 100,000 population). As of June 2021, 58.1% of the local population had received a single vaccine dose, with 36.8% of the population having had 2 doses (MOH, 2021). Only visitors who intended to visit for \geq 30 minutes received RAD testing. A single test result was taken as valid for the purposes of entry triage for 24 hours; whereas frequent visitors would have had serial daily testing, it was infeasible to require 2 separate negative tests 24-48 hours apart for a single hospital visit. As previously cited, the use of the national digital contact-tracing tool to register entry/exit to hospital premises was made compulsory for all visitors who had to pass through mandatory perimeter screening regardless of visit duration (Wee et al., 2021), allowing retrospective contact tracing of potential exposures arising from all visitors who subsequently tested positive for COVID-19 elsewhere. Although most visitors (82.4%, 10521/12763) remaining on hospital premises for >30 minutes did undergo RAD testing, a small minority of them were not tested because they overstayed beyond the initial visit duration that was declared. Only visitors with recent previous polymerase chain reaction (PCR)-confirmed COVID-19 infection received an exemption from RAD testing. No CONSORT (Consolidated Standards of Reporting Trials) flow diagram was included as this was an observational study.

During the study period, a total of 6 visitors with PCRconfirmed COVID-19 infection were thus identified, and the epidemiological details are given in Table 1 of the study. Identifying information for visitors was omitted as most of them were not patients at our hospital, and this was not relevant for contact-tracing investigations. For the single case of PCR-confirmed COVID-19 infection picked up on RAD screening (Case 6), RAD tests on preceding visits were negative.

Funding source

This research was not grant funded.

Ethics approval

Because this study was conducted as part of an outbreak investigation, ethics approval was not required under our institutional review board guidelines.

Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Boddeti NL, Berezowski I, Taylor D, Prajapati D, Patel J. The Low Yield of SARS-CoV-2 Rapid Antigen Testing in Screening Asymptomatic Hospital Visitors in Low-incidence Settings. Int J Infect Dis 2022 [Epub ahead of print].
- Centers for Disease Control (2020). COVID-19 and Your Health. Retrieved from https: //www.cdc.gov/coronavirus/2019-ncov/travelers/how-level-is-determined.html. Accessed 16th Jan 2022].</number>
- Ministry of Health, Singapore (2021). Update on local COVID-19 situation 30th June 2021. Retrieved from https://www.moh.gov.sg/news-highlights/details/updateon-local-covid-19-situation-(30-june-2021) [Accessed 16th Jan 2022]
- Wee LE, Venkatachalam I, Sim XYJ, Tan KB, Wen R, Tham CK, Gan WH, Ko KKK, Ho WQ, Kwek GTC, Conceicao EP, Sng CYE, Ng XHJ, Ong JY, Chiang JL, Chua YY, Ling ML, Tan TT, Wijaya L. Containment of COVID-19 and reduction in healthcare-associated respiratory viral infections through a multitiered infection control strategy. Infect Dis Health 2021;26(2):123–31 May. doi:10.1016/j.idh.2020.11.004.
- Wee LE, Conceicao EP, Sim JX, Venkatachalam I, Wijaya L. Utilisation of SARS-CoV-2 rapid antigen assays in screening asymptomatic hospital visitors: mitigating the risk in low-incidence settings. Int J Infect Dis Jan 2022;114:132–4. doi:10.1016/j.ijid.2021.11.011.

Liang En Wee* Department of Infectious Diseases, Singapore General Hospital, Singapore

Edwin Philip Conceicao

Department of Infection Prevention and Epidemiology, Singapore General Hospital, Singapore

Jean Xiang-Ying Sim, Indumathi Venkatachalam Department of Infectious Diseases, Singapore General Hospital, Singapore

https://doi.org/10.1016/j.ijid.2022.01.049

^{1201-9712/© 2022} Published by Elsevier Ltd on behalf of International Society for Infectious Diseases. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

International Journal of Infectious Diseases 117 (2022) 187-188

*Corresponding Author: Dr Wee Liang En Ian, Singapore General Hospital, Department of Infectious Diseases, 20 College Road, Singapore 169856, Telephone Number: +65 96777651 *E-mail address:* ian.wee.l.e@singhealth.com.sg (L.E. Wee)

Department of Infection Prevention and Epidemiology, Singapore General Hospital, Singapore

Limin Wijaya Department of Infectious Diseases, Singapore General Hospital, Singapore