

Re: “Antibody titres in workers with and without breakthrough infection during the Delta and Omicron waves”

Dear Editor,

We would like to share ideas on the publication “Antibody titres in fully vaccinated healthcare workers with and without breakthrough infection during the Delta and Omicron waves.”^[1] The antibody response to the Covishield vaccine against SARS-CoV-2 among healthcare workers (HCWs) was examined in this repeated cross-sectional investigation. The study included 133 HCWs in phase 1, with 100% of infection-free HCWs demonstrating seroconversion after 28 days of the second vaccine dosage. A subset of 61 HCWs was evaluated in phase 2 9 months following the second dosage, during the Delta and Omicron waves. In phase 1, 33% of HCWs had breakthrough infections, while 24% had a history of infection in phase 2. During both waves, antibody titres were greater in the breakthrough infection group compared to the infection-naïve group.

This study offers significant new information about HCWs’ antibody reactions to the Covishield vaccine. It draws attention to the high prevalence of seroconversion after immunization and the existence of emerging diseases. Informational value is added by comparing antibody titres between groups exposed to the breakthrough infection and infection-naïve groups during several waves. This study’s tiny sample size, especially in phase 2 with only 61 HCWs, could be a limitation. The generalizability of the results to broader populations may be impacted by the sample size limitations. Furthermore, because the study primarily looked at healthcare professionals, it may not accurately reflect the general community. It would be helpful to conduct more studies with larger and more diverse sample sizes to confirm and deepen our understanding of the antibody response to the Covishield vaccine.

The outcomes of COVID-19 and immunization rates could be affected by these variables, which would change the vaccine’s previously established scientific efficacy. The outcomes of the immunization may have been influenced by prior asymptomatic COVID-19 infections. The reaction might also be influenced by genetic make-up.^[2] It may be challenging to verify the vaccine’s long-term effectiveness in preventing COVID-19 in humans

because the experiment lacked a clear follow-up time. Potential confounding factors that could have influenced the results but were not examined in this study include comorbidities, socioeconomic status, and accessibility to healthcare.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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