

## Transition to living with Covid-19 helped by Omicron

Lee Li Ying

The contagious nature of the Covid-19 Omicron variant helped highly vaccinated populations transition to living with the disease, a study by Duke-NUS Medical School and the National Centre for Infectious Diseases (NCID) found.

“Omicron’s higher transmissibility has resulted in more people acquiring hybrid immunity, which better protects people against reinfection,” said Professor David Lye, NCID’s director of infectious disease research. He is among the team of scientists who conducted the study analysing people’s immune responses to a group of viruses known as sarbecoviruses.

The Omicron variant was also found to confer “mucosal immunity” to people exposed to it. This refers to the immune response in the membrane lining of the nose and throat that can halt pathogens before they spread to the rest of the body.

“Omicron infections in vaccinated and boosted patients are also much milder, with much lower rates of lung infections and need for oxygen support,” said Prof Lye.

The findings, published in the journal *Nature Microbiology*, suggest that Omicron evolved to escape immunity from past infection or vaccination.

Additionally, people who received the Pfizer-BioNTech vaccine and were later infected with Sars-CoV-2 had broader immune responses compared with those who had received the vaccine but were not infected.

Professor Wang Linfa from Duke-NUS’ Emerging Infectious Diseases programme, who was also involved in the study, said: “Our findings are highly important, as they will guide us in the future response to the pandemic, including the development of better and more broadly protective vaccines.”

In a separate study by the Agency for Science, Technology and Research Infectious Diseases Labs (A\*Star ID Labs), researchers found that Singaporeans aged 60 and above develop weaker vaccine-acquired immunity against Covid-19 after receiving two doses of the Pfizer jab, in comparison with their younger counterparts.

The study, which included 312 individuals, was published in the journal *Nature Communications*. It found that a booster jab alleviates the weak immune response observed in older people by increasing the levels of virus-specific antibodies and T-cell responses against the ancestral Sars-CoV-2 Wuhan strain, the Delta and Omicron variants.

Dr Fong Siew-Wai, research scientist at A\*Star ID Labs, said: “It is crucial for those who have been vaccinated to get boosted, especially the elderly, to acquire protection against the Sars-CoV-2 variants that are still emerging and spreading among people.”

liyinglee@sph.com.sg