Study reveals Delta variant doubles COVID hospital risk



Medical workers move a patient between ambulances outside the Royal London Hospital amid the coronavirus pandemic in London [File: Toby Melville/Reuters]

London, August 29 (RHC)-- The Delta variant of the coronavirus that causes COVID-19 doubles the risk of hospitalisation compared with the Alpha variant it has supplanted as the dominant strain worldwide, researchers reported in The Lancet on Saturday.

Only 1.8 percent of the more than 43,000 COVID-19 cases assessed in comparing the two variants were in patients who had been fully vaccinated. Three-quarters were completely unvaccinated, and 24 percent had received only one jab of a two-dose vaccine.

"The results from this study therefore primarily tell us about the risk of hospital admission for those who are unvaccinated or partially vaccinated," said co-lead author Anne Presanis, a senior statistician at the University of Cambridge's MRC Biostatistics Unit.

Researchers analysed healthcare data from 43,338 COVID-19 cases in England from March 29 to May 23 of this year, including vaccination status, emergency care, hospital admission and other patient information.

All virus samples underwent whole genome sequencing, the surest way to confirm which variant had caused the infection. Just below 80 percent of the cases were identified as the Alpha variant, and the rest were Delta.

About one in 50 patients were admitted to hospital within 14 days of their first positive COVID-19 test. After accounting for factors that are known to affect susceptibility to severe illness – including age, ethnicity, and vaccination status – the researchers found the risk of being admitted to hospital was more than double with the Delta variant.

Since these samples were taken, Delta has surged and now accounts for more than 98 percent of new COVID-19 cases in Britain, the authors said. Multiple studies have shown that full vaccination prevents infection with symptoms and hospitalisation for both Alpha and Delta variants.

"We already know that vaccination offers excellent protection against Delta," said Gavin Dabrera, another lead author and consultant epidemiologist at the National Infection Service, Public Health England. "It is vital that those who have not received two doses of vaccine do so as soon as possible."

An earlier study from Scotland also reported a doubling in hospitalisation risk with Delta over Alpha, suggesting that Delta causes more severe disease.

The Delta variant was first reported in India in December 2020 and early studies found it to be up to 50 percent more transmissible than the Alpha variant, which was first identified in England in September last year.

Nearly 4.5 million deaths worldwide have been attributed to COVID-19, though the final tally is likely to be higher once "excess deaths" are calculated over the pandemic period.

In some countries – and some states within the United States – hospitalisation and death rates are the highest since the first cases reported at the beginning of 2020.



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