DELTA VARIANT AND RISK OF HOSPITAL ADMISSION

Delta variant: what is the real risk of hospital admission?

Roland Salmon retired consultant epidemiologist

Wise reports on the finding that patients with the delta variant of SARS-CoV-2 are more than twice as likely to be admitted to hospital than those infected with the alpha variant.¹ ²

This news item, along with other coverage of the study, emphasises the adjusted odds ratio of 2.26 (95% confidence interval 1.32 to 3.89), an apparent doubling of risk of hospital admission for patients with the delta variant. But, as the news piece also mentions in passing, 2.3% of patients with the delta variant were admitted to hospital compared with 2.2% for the alpha variant. This represents an unadjusted odds ratio of 1.03 (0.88 to 1.21), essentially unity. The potentially confounding variables that seem to have had the greatest effect on the alteration of the unadjusted odds ratio are ethnicity (white versus Asian), region of residence in England, and calendar week of specimen (table 1 in the original paper). But what if these variables are not associated with the exposure and the outcome? That is, what if they are not confounding? Has their introduction produced an apparently elevated risk where there is none, an alpha error?

The original work is comprehensive and careful, but caution should be exercised in repeating uncritically its finding of double the risk. The observed requirement for hospital care during the study period, as we have seen, was much the same for patients with the delta variant as for patients with the alpha variant.

Competing interests: Medical referee, Cardiff Council Crematorium, remunerated on a fee for service basis. Member, Health Advisory and Recovery Team (HART).


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