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It is becoming increasingly clear that people are less likely to die if they get covid-19 now compared with earlier in the pandemic, at least in Europe, but the reasons why this might be the case are shrouded in uncertainty.

One UK doctor has said that the coronavirus was “getting a little bit less angry”, while an infectious disease consultant at the National University of Singapore claimed that a mutated version of the coronavirus, D614G, is making the illness less deadly.

In England, the proportion of people infected by the coronavirus who later died was lower in early August than it was in late June. Over the period, this infection fatality rate (IFR) dropped by between 55 and 80 per cent, depending on which data set you use, says Jason Oke at the University of Oxford and his colleagues.

“This doesn’t seem to be the same disease or as lethal as it was earlier on when we saw huge numbers of people dying,” he says. For example, the week beginning on 17 August saw 95 people die and just over 7000 cases across the UK. In the first week of April, 7164 died and nearly 40,000 tested positive.

Dividing deaths by cases gives a crude case fatality rate of about 1 per cent in August, compared with nearly 18 per cent in April. These figures don’t represent the true IFRs at these times because deaths lag behind infections by a few weeks, and because testing regimes have changed over time – but they are indicative of a shift in the IFR. Oke and his colleagues used a more sophisticated method to estimate the change in IFR.

The situation isn’t unique to England and the rest of the UK, says Oke, who has found the same trend repeated across Europe. Why this is happening isn’t clear. According to data for England, a larger proportion of younger people are being infected than was happening around the first peak of cases in April, with cases rates for 10 to 16 August the highest among 15 to 44 year olds.

Covid-19 is known to be less risky the younger you are, so the changing demographic of those being infected could be one plausible reason that the disease currently seems less deadly. Yet Oke doesn’t think the change in age distribution alone is enough to account for what is happening. There are still a lot of older people testing positive, he says.

Several researchers have told New Scientist that the other main possible explanation is that cases are being treated more effectively in hospitals. Other possible explanations include there being a seasonal nature to the disease like with flu or that even though more people are testing positive, many of those cases have relatively low levels of the virus because people are following social distancing guidelines, reducing the severity of the outcome. Neither idea has been proven yet.

The jury is also out on whether one variant of the coronavirus, known as D614G, explains why covid-19 is becoming less deadly. Paul Tambyah at the National University of Singapore told Reuters that the rise of the D614G mutation had coincided with drops in death rates in some countries, suggesting that it might be “more infectious but less deadly”.

Other research disagrees, concluding that while D614G may be more contagious, there is no evidence it is less deadly. A study led by Erik Volz at Imperial College London, published this month but not yet peer-reviewed, looked at the genome of virus samples taken from 19,000 UK patients, along with whether they had died from covid-19.

“We do not see reduced risk of death due to the D614G variant,” says Volz. He adds that failing to control for the age of patients in modelling can lead to a “spurious conclusion” that the mutation “has less severe outcomes”.

Daily coronavirus news round-up
Online every weekday at 6pm BST
newscientist.com/coronavirus-latest