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ACUTE PERSPECTIVE

David Oliver: Mistruths and misunderstandings about covid-19 death numbers

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I want to set the record straight about some serious misinformation surrounding covid-19 death certification and mortality statistics. I will paraphrase some of the claims that I have heard repeatedly in the media:

"People are not dying from, but with, covid-19."
"Deaths classified as from covid-19 result from largely false positive polymerase chain reaction (PCR) test results," "deaths are mostly from other causes and underlying conditions," "death numbers are grossly inflated," "there is no excess mortality compared with other years or months," and this is "no different from a normal flu season."

Let's see, shall we?

According to the Office for National Statistics (ONS), the total number of deaths with covid-19 recorded on the death certificate in England and Wales has now passed 100 000. The government's daily press releases, however, report "deaths within 28 days of a positive test result"—a definition repeated faithfully by broadcast and print journalists and on social media. This approach probably under-recognises the real number of deaths from covid-19 by around 20%.

Having two parallel reporting methods is unfortunate as it plays into the "What are they not telling us?" narrative of covid denialists, conspiracy theorists, and lockdown sceptics.⁴

ONS data are based on what doctors responsible for a patient in their final illness write on the death certificate to the "best of [their] knowledge and belief," and they do not take into account how recently the deceased had had a positive covid-19 test result. I would advise anyone therefore to trust ONS data above the government's reporting tool. In 90% of certificates where covid-19 is recorded, it does so in part 1 as the cause contributing directly to death. The Nuffield Trust has issued a similar note of caution about covid-19 death statistics.

In the first few months of the pandemic, access to covid-19 testing was scarce even for hospital patients who were clearly infected, let alone for those in care homes or private residences. Some death certificates might therefore have mentioned "covid-19" despite the absence of a positive result if the clinical picture was clear. In other cases, doctors might have been reluctant to put covid-19 on a certificate in the absence of a test even though the clinical picture was clear.

We have far better access to testing now, but systematic review has shown that PCR tests for covid-19 still have an initial false negative rate of 2-29% in people who then go on to test positive or develop clinical features of covid-19.9

As we know, death certification is a serious professional duty. It is done with diligence and, for deaths in hospital, is usually discussed with a medical examiner (although this step was suspended for a few months¹⁰ in the first pandemic wave in early 2020).

The personal and professional consequences of fabricating or distorting certificates would be serious, and there is no mass conspiracy or incentive, financial or otherwise, to do so. Nor is it credible that such a plot would not have been leaked by now via disgruntled whistleblowers.

We sometimes certify deaths in patients who died from covid-19 or its complications well beyond 28 days. A study from Leicester University followed over 40 000 people with covid-19 discharged from hospital for 140 days and found a readmission rate of 31% (23% within 60 days), with 9% dying on readmission. Obviously not all those deaths were from covid complications, but it seems clear that many were accelerated by them.

Meanwhile, data are emerging that give the lie to the notion that covid-19 is no worse than or different to seasonal flu. The ONS reported in January 2021 that England and Wales had seen the highest increase in excess mortality in 2020 in any year since 1940. And a paper in *The BMJ* comparing 4000 patients with influenza and 12 000 with covid-19 in Wuhan, China, showed much greater severity of symptoms and much higher morbidity and mortality among those with covid-19.

Doctors treating patients with covid-19 over the past 12 months recognise a very different clinical syndrome in the sickest patients and a tide of cases of a kind, severity, and clinical course that we have not seen before. We don't diagnose cases solely on the basis of PCR tests. Furthermore, PCR false positive rates are very low in people with symptoms and high pretest probability.⁷

Every time we see or hear such mistruths we need to combat them and call them out. They are used to play down the seriousness and consequences of covid-19 and undermine health protection efforts.

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