

Study into mRNA vaccine death rates sends 'danger signals'

Video

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A new study reveals disparities in all-cause mortality between mRNA and adenovirus vaccines

Do the covid vaccines save lives? That is the question on many people's minds, that has led to heated discussions across the world.

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A bombshell [new study](#) by a distinguished team of Danish researchers led by Prof. Christine Stabell-Benn suggests a surprisingly nuanced answer. In the randomized trials of the covid vaccines, the adenovector-based vaccines, including the AstraZeneca and Johnson & Johnson vaccines, reduced all-cause mortality of study participants relative to people randomly assigned a placebo. Indeed, the reduction in mortality is larger than expected from the Covid effect and may suggest additional beneficial "non-specific effects" from those vaccines against other health threats.

On the other hand, Stabell-Benn and her colleagues found no statistically meaningful evidence in the trial data that the mRNA vaccines reduced all-cause mortality. The numbers of deaths from other causes including cardiovascular deaths appear to be increased in this group, compensating for the beneficial effect of the vaccines on Covid. Stabell-Benn is keen to stress that the sample is relatively small and is calling for further investigation, and also that the study took place during very low levels of

Covid, so the relative advantage of protection against Covid would have been smaller at that time compared to at other points in the pandemic.

However, these preliminary results stand in sharp contrast to the unambiguous message from public health agencies and governments worldwide, which granted emergency authorization to the vaccines based on evidence from the trials that the vaccines reduce the likelihood of getting symptomatic covid. From a purely scientific perspective, preventing symptomatic covid is an interesting outcome to study. From a public health perspective, prevention of covid symptoms is not as important as prevention of death or disease transmission, which the randomized trials did not study. Dr. Stabell Benn and her colleagues have now looked at overall mortality for the first time.

At the very least, the plain implication (since both sets of vaccines are available) is that public health authorities should have recommended the cheaper adenovector vaccines over the mRNA vaccines all along for most patients.

In other words, the international move to de-authorise the AstraZeneca vaccine across Europe and elsewhere looks like it may have been a mistake, and that AZ was actually a better option than the Pfizer or Moderna vaccines.

It offers a potential contributory explanation for the better overall mortality outcomes in the UK (which overwhelmingly used the AZ vaccine) than much of continental Europe (which phased out the AZ vaccine) after the vaccine programme in the second half of 2021.

Since its publication in pre-print, the Stabell-Benn study has received very little coverage in the media. As Dr Stabell-Benn told Freddie Sayers in her UnHerd interview, she has become used to this reticence:

I have been in this game for now almost thirty years, studying vaccines and finding these non-specific effects which have been very controversial. There are strong powers out there that don't really want to hear about

them. But to me this is good news: it means that we can optimize the use of vaccines to not only be strong protective effects against vaccine disease, but we can also optimize their use in terms of overall health.

- Professor Christine Stabell-Benn, UnHerd

The reaction

For a study with such a consequential conclusion, review from independent experts is crucial. In the past, such peer-review took place in anonymity, behind the closed doors of a scientific journal, with a single editor or associate editor serving as an umpire. Because of the small number of people involved in the review, the peer-review process is subject to well-known biases and long delays (months or longer). Worse, the public never had access to these deliberations and was asked to take it as an article of faith that a published peer-reviewed paper presented accurate conclusions.

A better process for the scientific review of some important papers has emerged during the pandemic – open peer review whereby the public can see the conversation among scientific experts. Though the Danish team released their paper in early April, it was an [online review](#) by vaccine safety expert and world-renowned epidemiologist Martin Kulldorff that catalyzed a discussion by scientists about it.

In his review, Kulldorff pointed to the clear implication of the results of the Danish paper. When both mRNA and adenovector vaccines are available, it's better to take the vaccine with good randomized evidence of reductions in all-cause mortality rather than taking a vaccine where we cannot tell from the best evidence whether it reduces mortality. Kulldorff called for a new randomized controlled trial of the mRNA vaccine to find out if they can compete with the adenovirus-vector vaccines – as should occur in medicine whenever an effective intervention exists and another intervention seeks to show that it is as good or better. He also suggested that it is inappropriate to mandate vaccines for which the randomized clinical trials show a null result for mortality.

Kulldorff's open peer-review stoked some discussion among scientists about the feasibility of running a randomized trial comparing the vaccines. Mortality rates from covid infection – due partly to high levels of population immunity from covid recovery – are low, so a large sample size would be necessary to detect a difference. Whether such a study is even feasible is an open question, as is the importance of such a study. This kind of constructive discussion happens all the time in science.

However, some scientists – [including zero-covid advocate Deepti Guradsani](#) – reacted to Kulldorff's article with public smears, false accusations of spreading vaccine misinformation, and the usual claims about right-wing connections. Even Jeremy Farrar, the head of the Wellcome Trust and a prominent architect of the pandemic policy in the UK, joined the fray by promoting such smears on his Twitter feed.

Kulldorff is a prominent vaccine scientist who has presented his honest views on the covid vaccines, even when they go against the established narrative. In March 2021, he lost his position as an advisor to the US CDC for [recommending against](#) pausing the Johnson & Johnson vaccine for older Americans – an action that effectively killed the demand for the adenovirus vector vaccines in the US. He is the only person I know who the CDC has fired for being too pro-vaccine.

When scientists slander prominent vaccine scientists, that damages vaccine confidence. Scientists should be encouraged to evaluate, compare and discuss the strengths and weaknesses of different vaccines, and to be free to advocate for one vaccine over another. Farrar's promotion of the lies is particularly insidious because it sends a signal to scientists who might be interested in funding from the Wellcome Trust to shy away from voicing their honest thoughts about the Danish study or vaccines in general.

The stakes in the discussion about this paper are tremendously high. Of course, for the public at large, what covid vaccine is best for them is literally a life-and-death question. For scientists, at stake is the ability to participate honestly in open scientific reviews of hot button topics without

having to face smears and reputational damage based on lies by other prominent scientists. If scientists lose their ability to reason publicly about studies like the ground-breaking Danish study, physicians will have no solid basis for their advice to patients on this topic or much else, and the public will have no reason to trust physicians and scientists.