

Messenger RNA COVID-19 Vaccines Had No Effect on Overall Mortality: Trial Data Reanalysis

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Pfizer-BioNTech COVID-19 vaccines in Denmark in a 2021 file image. Claus Fisker/Ritzau Scanpix/AFP via Getty Images

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The Pfizer and Moderna COVID-19 vaccines did not impact overall mortality, a reanalysis of clinical trial data found.

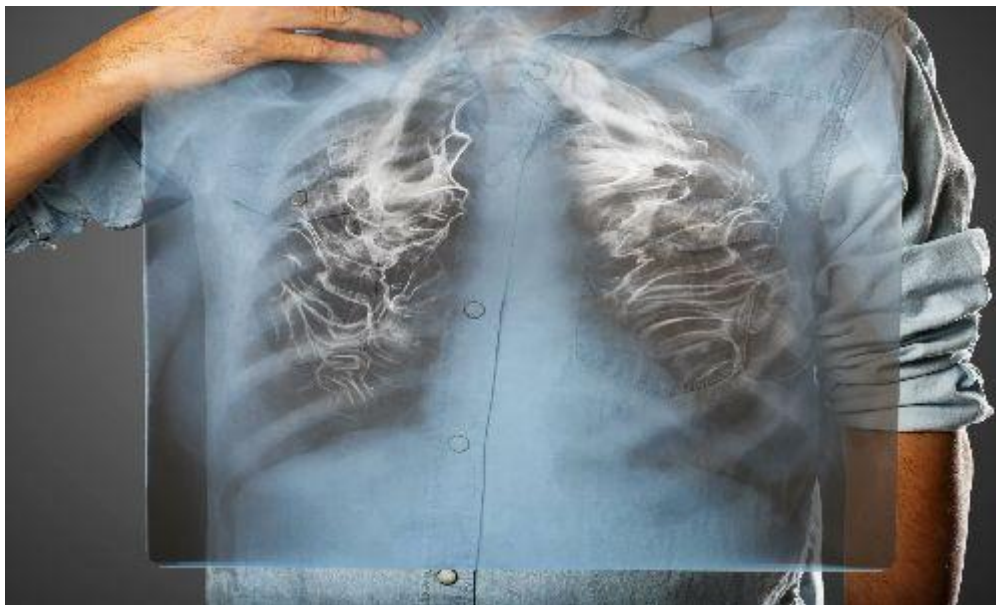
The two vaccines, both based on messenger RNA (mRNA) technology, protected against deaths from COVID-19 but that effect was offset by vaccinated trial participants being more likely to die from cardiovascular problems, Christine Stabell Benn, a health professor at the University of Southern Denmark, and other researchers reported in April in the Cell journal.

On the other hand, vaccines that utilized adenoviruses, such as the Johnson & Johnson vaccine, had a favorable impact on both COVID-19 mortality and overall mortality, according to the reanalysis.

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The research analyzed data from randomized clinical trials (RCTs) reported by the companies that manufacture the vaccines.

“In the RCTs with the longest possible blinded follow-up, mRNA vaccines had no effect on overall mortality despite protecting against some COVID-19 deaths. On the other hand, the adenovirus-vector vaccines were associated with lower overall mortality,” researchers said.

“The differences in the effects of adenovirus-vector and mRNA vaccines on overall mortality, if true, would have a major impact on global health,” they added later.

Pfizer, Moderna, Johnson & Johnson, and AstraZeneca did not respond to requests for comment.

Study

Benn and colleagues took data from three RCTs for the mRNA vaccines and six RCTs for the adenovirus-vector vaccines that had mortality data available. They compared the overall deaths in the vaccinated arms with the placebo arms. They also broke deaths down into different categories: attributed to COVID-19, cardiovascular problems, other non-COVID-19 causes, accidents, and non-accident, non-COVID-19 causes.

“We extracted the number of deaths from the studies that led to approval of the new mRNA and adenovirus-vector COVID-19 vaccines. We calculated the relative risk of

dying, overall, and for various causes of death, for each vaccine type,” Benn told The Epoch Times in an email.

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The Pfizer and Moderna vaccines, the researchers found, were associated with lower COVID-19 mortality but higher cardiovascular and non-accident, non-COVID-19 mortality. There was no difference in overall mortality between the vaccinated arms and the placebo groups.

The Johnson & Johnson vaccine was associated with lower overall mortality and with lower non-COVID-19 mortality, with no effect on COVID-19 mortality. AstraZeneca’s shot, never authorized in the United States but cleared in some other countries, performed well against overall mortality and other categories across several trials, except for one trial where slightly more vaccinated people died from non-COVID causes or non-accident, non-COVID-19 causes.

“The results suggest that adenovirus-vector vaccines compared with placebo have beneficial non-specific effects, reducing the risk of non-COVID-19 diseases. The most important cause of non-COVID-19 death was cardiovascular disease, against which the data for the current RCTs suggest that the adenovirus-vector vaccines provide at least some protection,” researchers said.

They noted that trial populations were largely healthy adults and that in the real world, even mRNA vaccines were expected to reduce overall mortality. But “the intriguing differences in the effects on non-accident, non-COVID-19 mortality are likely to persist and should be investigated in future studies,” they added.

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Overall mortality spiked in a number of highly vaccinated countries after the vaccines were rolled out, including the United States. Researchers are divided as to the causes, with some arguing the vaccines primarily drove the increases and others blaming COVID-19 and other factors.

The study was published ahead of peer review in 2022, but the authors struggled to find a journal that would accept the paper, Benn said. Several journals rejected it without explaining why, causing a delay in publication.

Immune System Impact

Several experts complimented the paper.

“This is a good article that raises food for thought,” Dr. Peter Gotzsche, professor emeritus and director of the Institute for Scientific Freedom in Denmark, told The Epoch Times via email.

Gotzsche wrote about research conducted by Peter Aaby, one of Benn’s co-authors, in his book “Vaccines: Truth, Lies, and Controversy.” Some of Aaby’s other papers have supported the hypothesis that live attenuated vaccines like adenovirus vectors help decrease overall mortality while vaccines that contain the killed version of a germ that causes a disease increase total mortality.

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Such “unexpected results” can complicate public health messaging, Gotzsche wrote.

Previous research, including a 2013 paper from Benn and Aaby, has suggested that some vaccines provide non-specific effects, or increased protection against unrelated pathogens. They posited that the adenovirus-vector COVID-19 vaccines might “prime the immune system in a way similar to a ‘live’ vaccine,” while noting that the Pfizer and Moderna vaccines increase inflammation, which could lower the immune system’s protection against other illnesses.

Benn, Aaby, and other experts said in a separate paper in April that the current framework for testing and regulating vaccines needs to be updated because of how vaccines may impact the risk of contracting unrelated diseases.

Criticism

Dr. David Boulware, a professor of medicine at the University of Minnesota’s Medical School, was among the critics of the new study. He told The Epoch Times in an email that it was poorly designed because of differences in where the trials were conducted. That’s because some countries, such as the United States, have better health care, he said.

The researchers acknowledged that might be true in the limitations section, writing that “differences between the study populations in the RCTs of the two vaccine types could have biased the comparison as different disease patterns and level of care could have influenced the measured effect of the vaccines on overall mortality.”

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The researchers added: “More individuals were infected with COVID-19 in the mRNA RCTs than in the adenovirus-vector vaccine RCTs, but there were more COVID-19 deaths in the adenovirus-vector RCTs. This suggests that participants in the mRNA RCTs may have had access to better health care during COVID-19 infection, and this may have reduced the impact of mRNA vaccination on overall mortality.”

Boulware also said that real-world data “does not support the conclusions of the paper,” pointing to observational data from Israel and Minnesota. “Clearly the mRNA vaccines protect better against COVID than adenovirus vector vaccines,” he said.

Benn said the study was “built on a meta-analysis of placebo-controlled RCTs—the highest degree of evidence in the evidence pyramid.” and that the key point of focus was overall mortality.

“He is discussing COVID-19—we are studying all-cause mortality,” Benn said. “It is irrelevant if a vaccine protects better against COVID-19 than another vaccine, if it reduces overall mortality to a lesser degree—unless you think that COVID is worse than death.”