Flu shot reduces risk of death for people with heart disease

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For people who have heart disease, getting a flu shot greatly reduces the

risk of dying or developing serious heart-related complications, a new analysis shows.

The meta-analysis of 16 randomized and observational studies covered the experiences of more than 237,000 people. It concluded those with heart disease who were vaccinated for the flu were 18% less likely to die from heart problems and 28% less likely to die from any cause. They also were 13% less likely to experience any type of major heart problem than those who didn't get a flu shot.

"Compare that to beta blockers and ACE inhibitors, which are used to control high blood pressure. They reduce mortality by 20-25%," said lead investigator Dr. Siva Yedlapati, an internist with Erie County Medical Center in Buffalo, New York. "This is totally compatible with that number, and it's just one shot per year, compared to taking medications every single day for the whole year. This is a huge benefit."

While analyzing the studies, Yedlapati said he also was surprised to learn that cardiologists often are least likely of all medical professionals to make the flu shot available to patients. "The flu vaccine is very beneficial to heart patients, and if cardiologists are least likely to stock it, that's a huge gap."

The study, which is considered preliminary until published in a peer-reviewed journal, was presented last week at the virtual Scientific Sessions conference held by the American Heart Association.

The Centers for Disease Control and Prevention recommends everyone over the age of 6 months be vaccinated for the flu. It is especially important for adults 65 and older, who make up the vast majority of flu-related hospitalizations and deaths. Research shows half of all adults hospitalized for the flu have heart disease, and the risk of having a first heart attack is six times higher following a flu infection.

And a standard-dose vaccination appears to be just as effective as a high-dose flu shot in people with heart disease, according to separate research presented at the scientific conference. That study found neither vaccine dose was more effective than the other at reducing the risk of death or hospitalizations for heart- or lung-related illness. That research was funded by the National Heart, Lung, and Blood Institute, with additional funding by vaccine maker Sanofi-Pasteur, which was not involved in the design, conduct or interpretation of results.

Despite the potential benefits, less than half of U.S. adults get the flu vaccine. "That is a very small number," Yedlapati said. "Clinicians should strongly advocate for their patients to get the flu vaccine. I'm hoping this paper will reinforce that."

While the new analysis does not add to what we already know, "it does tell us that we can have more assurance of the robustness of these findings," said Donna Arnett, dean of the University of Kentucky College of Public Health and a past president of the AHA.

Arnett, who was not involved in the study, said getting a flu shot was even more important this year because of the pandemic. "We still don't know the full extent of the COVID-related impact on the heart," she said, a question researchers are still exploring.

What we do know, Arnett said, is both can damage heart and respiratory health, and the flu vaccine can mitigate at least some of that risk. "Even if you still get the flu, you have a less intense disease burden if you've had the vaccine."