- Vaccination

'Flu vaccine could help ward off serious COVID'

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An American study has demonstrated "significant findings favoring influenza vaccination" to help reduce some of the more serious side effects of COVID-19.

"Examining the potential benefits of the influenza vaccine against SARS-CoV-2: A retrospective cohort analysis of 74,754 patients," was published by researchers from the University of Miami last week in the peer-reviewed PLoS One journal. According to their findings, based on electronic healthcare records from international databases – including from Israel – getting an annual flu shot could reduce the likelihood of experiencing stroke, sepsis and deep vein thrombosis (blood clots) as a result of COVID-19, as well as lower the chances of being admitted to the emergency department or the intensive care unit.

The doctors and scientists identified around 75,000 health records through the

Some 88% of people who received the third shot of the coronavirus vaccine said they felt "similar" or "better" compared to how they felt in the days following receiving the second vaccine, according to a new report by Clalit Health Services.

The health fund released a first report on the side effects of the third shot, based on data it captured from some 4,500 people over 60 out of the 240,000 of their members who received it.

Some 31% reported one or more side effects.

Some 24% reported pain at the site of injection, 6% swelling in the injection area and 1% swelling in the armpit.

Another 15% of respondents said they experienced at least one systemic side effect.

Some 9% reported fatigue, 6.1% feeling generally unwell, 4.3% headaches, 4.3% muscle pain, 2.1% joint pain, 1.4% fever, 0.7% vomiting or diarrhea and 0.1% rash.

Only 1% of respondents experienced any other symptoms: 0.4% reported difficulty breathing and 0.3% irregular heartbeat or chest pains.

Similarly, only 1% of respondents said they sought medical treatment due to one or more of these side effects.

"Although we do not yet have long-term research on the efficacy and safety of the third dose," said Prof. Ran Balicer, Clalit's chief innovation officer, "these findings continue to point to the benefit of immunization now, in addition to careful behavior by older adults and avoiding gatherings in closed spaces during these weeks."

At the same time, a small number of older people who were vaccinated with a third COVID shot were infected with coronavirus, The Jerusalem Post has confirmed.

The report was first published by N12.

Some 14 people out of more than 400,000 who were vaccinated with a third shot were diagnosed with the virus, among them two who were hospitalized – one in mild condition and the other in moderate condition, according to the Health Ministry.

The individuals were infected seven or more days after receiving the vaccine. The majority were over age 60, but three were under 60 and had received a third dose because they were immunosuppressed.

TriNetX research database to use in the study: 37,377 patients who had taken the flu vaccine – intranasal or intramuscular – between two weeks and six months prior to being diagnosed with the virus, and 37,377 who had not taken the flu vaccine before catching corona. Patients were matched on age, gender, race, ethnicity and if they had any preexisting medical conditions that could impact their outcomes, such as diabetes, obesity or heart disease.

Then, they compared the incidence of 15 adverse outcomes within 30, 60 and 120 days of testing positive for coronavirus.

Specifically, those who did not get their annual flu shot were 58% more likely to be admitted to the emergency department and 20% more likely to be treated in the ICU. Moreover, without the flu shot, they were 58% more likely to have a stroke, 45% were more likely to develop sepsis and 40% more likely to develop blood clots.

The study found no association between flu vaccination and the risk of death from COVID-19.

According to the report, it is not exactly known yet how the flu vaccine would provide protection against COVID-19 symptoms, and "no cross-reactivity between influenza-induced antibodies and SARS-CoV-2 protection has been demonstrated." However, it said that several theorized mechanisms of the potential protective effects of the flu vaccine have been proposed.

Dr. Oren Kobiler, a researcher at Tel Aviv University, suggested that perhaps the intranasal flu vaccine could activate the immune system around the nasopharynx and therefore provide better protection against other viruses as well, including corona. But he said, "I would not expect it to last that long."

He said that the flu and the coronavirus are "not related at all" other than that they both infect the upper respiratory tract and then travel down to the lungs.

"If the body is able to restrict infection only to the upper respiratory tract, then maybe they won't have any lung injury and so on," Kobiler said.

But he cautioned that while the flu vaccine may be found to alleviate some of the virus's side effects, "it is as not protective" against catching COVID.

"The results seem interesting, but I am not sure that they are indeed as meaningful as [the researchers] tried to put it," he said.

Similarly, Prof. Cyrille Cohen, head of the immunology lab at Bar-Ilan University, described the results as nothing more than "intriguing."

"From a biological standpoint there is little resemblance between the flu and SARS-Cov-2 viruses," Cohen stressed. "Sometimes we do know that when two viruses are quite close – two strains of flu or two strains of SARS – there might be some protective cross immunity. Here it does not appear that is the case."

Rather, he said that one could speculate that the flu vaccine, especially if taken repetitively each year, might stimulate the immune system in a general way and therefore be more active in fighting severe disease. Or it might enhance the function of broad reactive immune cells.

"One could hope that further research may shed light on the mechanism," Cohen concluded. "And in any case, it is always a good thing to get vaccinated against the flu."