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People Who Received Immunity Against Covid Through Vaccination are 13 Times More Likely to Get Reinfected Than Those With Natural Immunity, Study Finds

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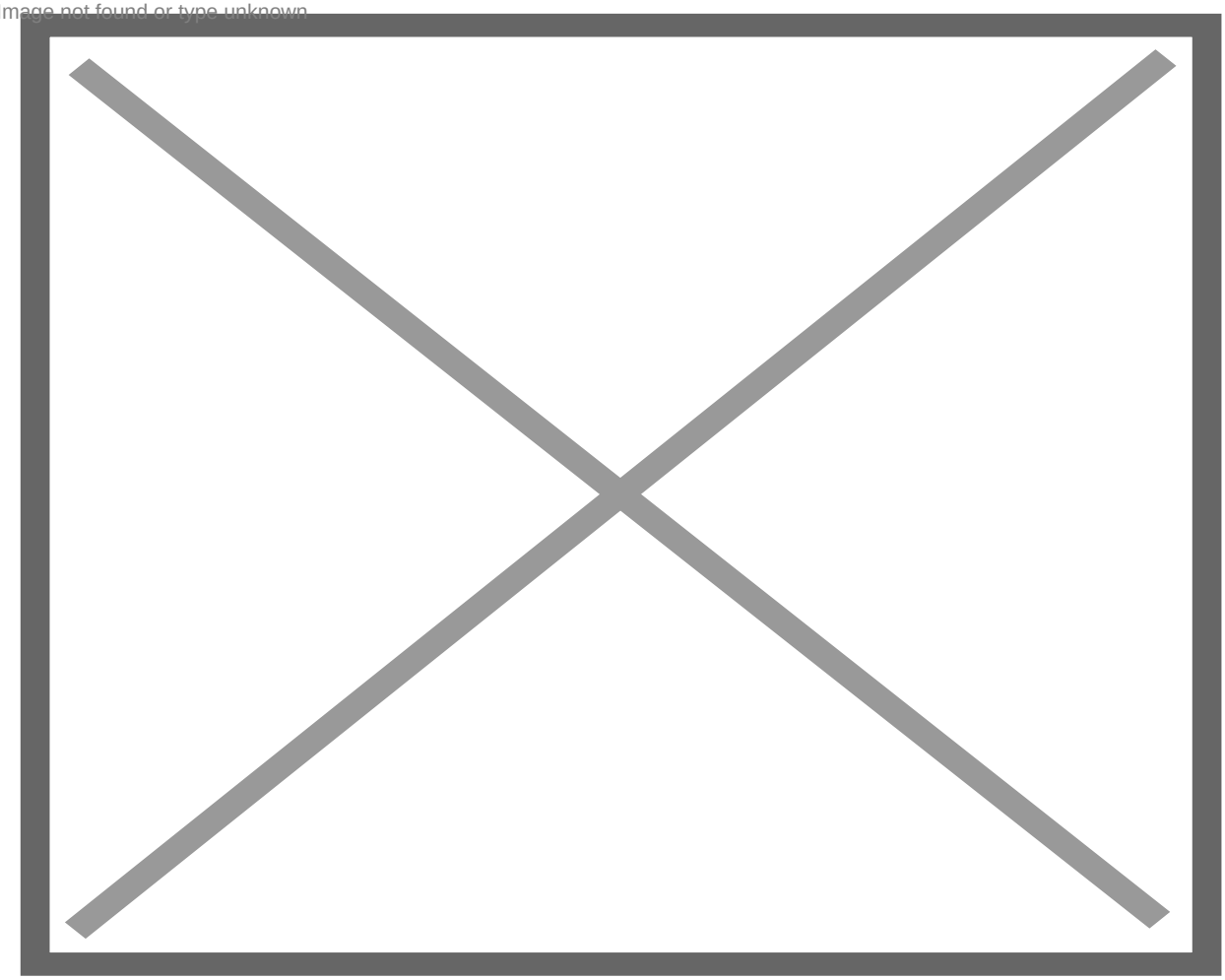

There is growing evidence that natural immunity against Covid-19 after infection is much more superior to immunity obtained by vaccines, including research that shows people who were vaccinated against Covid-19 were 13 times more likely to get reinfected compared to those with natural immunity.

The mounting evidence of the strength of natural immunity comes by way of multiple peer-reviewed studies conducted during the early months of the pandemic, as reported by the Wall Street Journal. The studies show that people infected during the first waves were around 80

percent less likely to test positive during the next surge. Those studies spanned healthcare workers in the U.K., the Danish population and patients at the Cleveland Clinic, a large health system with facilities mostly in Ohio and Florida, WSJ reported.

Though evidence continues to be strong for the case that vaccination is the surest way to prevent against severe illness, the studies' results have huge implications for how governments pursue vaccine mandates, with discussions around whether persons who had a previous Covid-19 infection need a full course of a Covid-19 vaccine. Also being debated in the U.S. is whether documented prior infection should count as proof of immunity as is already the case in most of Europe and many other countries.

According to WSJ, a recent Israeli study found that people who had been vaccinated with two shots of the Pfizer and BioNTech vaccine were 13 times more likely to later get infected than those with a prior infection. The study, which hasn't been peer reviewed, tracked confirmed infections between June and August this year for people who had been either vaccinated or infected in January or February, according to the report.

The study also found that immunity from infection lasts longer than that obtained from vaccination.

David Dowdy, associate professor of epidemiology at the Johns Hopkins Bloomberg School of Public Health, told WSJ that the protective benefit of the Israel study could have been exaggerated, arguing that vaccinated people were more likely to travel abroad and bring the virus back home to their vaccinated family members.

But the increasing body of data building the case for natural immunity has been coming from around the world, including the United Kingdom's Office for National Statistics, which found that between May and August, immunity from a prior infection offered around the same level of protection against the Delta variant as those vaccinated with the vaccines developed by either Pfizer or AstraZeneca.

A study by the Centers for Disease Control and Prevention had suggested that among people hospitalized with a respiratory illness related to Covid-19, the virus was over five times more common in those who were unvaccinated and had a prior infection compared to those who were fully vaccinated. But critics have panned the CDC study, contending that it had flaws that overstated the strength of the vaccines. The CDC is now saying that current evidence shows that both natural immunity and immunity provided through vaccination offer defense against reinfection for at least six months.

Further bolstering the case recognizing natural immunity in the U.S. is data showing that it offers longer-lasting immunity. According to a recent paper published in the journal Nature by researchers at the Rockefeller University in New York, immunity through vaccines using the mRNA technology, including Moderna's and Pfizer's, produce more neutralizing antibodies. However, immune memory from natural immunity appears to be stronger. According to WSJ, "The Rockefeller research group found in an earlier study, also published in Nature, that the antibodies produced by memory B cells—which quickly multiply in subsequent encounters with the virus—continued to evolve at least a year after infection. The study on vaccinated people found that the antibodies produced by their memory B cells didn't change much over time.

"One possible reason for the difference, they said, was that pieces of virus remain in the body for weeks after infection, whereas vaccine particles fade away faster. The upshot: The immune memory of people who have been infected is ready to produce a broader array of antibodies than

of people who have been vaccinated."

WSJ quoted Michel Nussenzweig, the professor who led the Rockefeller research, as stating that the papers suggest that vaccination likely offers better protection from infection but that this protection wanes rapidly. However, the quality of long-term immune memory, which is key to responding to infection and staying out of the hospital, is superior in people who have had an infection, he said.

The report also documents data suggesting that so-called hybrid immunity — where a person who has natural immunity gets vaccinated — provides the strongest protection above all.

Yet questions remain as to whether people who have acquired natural immunity need a full course of vaccines. According to the WSJ report, a study from New York University found that although one dose of the Pfizer vaccine significantly increased antibody levels in people with a prior infection, a second dose produced a more muted response.

The report further states, "Another study from researchers at the Icahn School of Medicine at Mount Sinai in New York found that a single dose of the Pfizer or Moderna Inc. vaccines produced more antibodies in people who had previously had Covid-19 than two doses did in those who had never encountered the virus. It also found that people with prior infection report more unpleasant side effects from vaccination. The authors concluded that offering a single shot to those who had already had Covid-19 wouldn’t negatively affect their antibody levels and would spare them from needless pain. The NYU and Icahn studies haven’t been peer reviewed."