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Why vaccine is a better shot at immunity than infection

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Days after taking the first dose in a vaccine trial, Haryana minister Anil Vij tested positive for Covid- 19. Experts pointed out that even if he had received the vaccine dose, and not a placebo, he'd only taken the first of two prescribed doses and hence may not have achieved adequate antibody levels. But people who have been infected should all the same not opt out of taking the final vaccine when it's released, because though one is bound to get antibodies after recovering from Covid-19, a vaccine brings a more certain guarantee of immunity against the disease, experts say.

VACCINES GET STRAIGHT TO THE POINT

About of Covid- 19, experts agree, is enough to create anti bodies and specific immune cells against the disease. But scientific opinion is divided over how long such immunity lasts. Reinfections of Covid-19 have been clocked at an interval of three months, although evidence suggests that for some coronaviruses, of which Sars- CoV-2 is an example, immunity may last for years.

But given that they are tailored to induce an optimum immune response, vaccines can trigger better immunity than natural infection. Experts cite the vaccine for pathogens like pneumococcal bacteria, which induces stronger immunity than the natural infection. The Moderna trial volunteers who received the vaccine shot had more antibodies in their blood than those who had contracted Covid-19.

Since vaccines are aimed at making you resilient against a disease, they are designed to work against specific targets. The human papillomavirus (HPV) vaccine draws out a stronger immune reaction than infection thanks to higher presence of a viral coat protein that induces neutralising antibodies. But experts also point to the case of mumps, whose vaccine gives lifelong immunity, although some people who have received the vaccine still end up getting the disease.

INFECTION DOESN'T TRIGGER SAME IMMUNE RESPONSE

It is generally agreed that people who've experienced a mild disease do not have great concentrations of antibodies in their blood. For people who were asymptomatic or only had a mild infection of Covid-19, antibodies may decline within months, exposing them to the risk of reinfection. However, when it's a vaccine, everybody gets the same dose that is designed to elicit a satisfactory immune response.

YOU CAN'T CONTROL THE COVID YOU GET

Only a very small fraction of people who get Covid are going to develop serious symptoms and need hospitalisation. Antibody surveys across the world suggest that far more people

may have had the disease and recovered from it than is captured in official data, giving rise to speculation about communities achieving herd immunity. But experts caution that people should not take any chances with the disease because it is not certain what kind of symptoms one may develop and the level of medical aid that would be available to a patient.

In a study of more than 3,000 peo ple aged between 18 and 34 years who were hospitalised with Covid, a fifth required intensive care and 3% died, the NYT says. So, it is not that even for the age groups that are seen as being less vulnerable to Covid, the risk of serious illness is non- existent.

Plus, there's post- recovery worries with experts saying that chronic complaints appear common among a good share of those who have recovered from Covid. Vaccines come with none of these attendant risks and are also tested for serious side effects. Although adverse events have come to light in trials, vaccines are designed not to repeat the unintended effects.

IF YOU'RE A SURVIVOR, TAKE A SHOT

Vaccine triage lists being drawn up by countries have mostly kept those who have contracted Covid and recovered last in line for a dose. The working assumption being that such people will have at least some antibodies and are hence better protected than the vulnerable groups like the elderly and those with comorbidities like obesity, diabetes, etc. But experts say that when they do get a chance, even those who have had Covid should take a vaccine because it will boost whatever immunity they already have.