Addressing the Belief That COVID-19 Vaccination Is "Not Needed"

The Issue

Some people remain unconvinced that they will benefit from COVID-19 vaccination; some doubt that the benefits will outweigh possible risks. This may be especially true of younger adults (who may consider themselves at low risk of serious illness) and people who have recovered from COVID-19 infection. Some people believe that "natural immunity" following a COVID-19 infection is equal or superior to immunity produced by a vaccine.

Sound Bites

- Vaccination is the safest way to help build protection against COVID-19.
- The immune response to a primary vaccine series—especially with mRNA vaccines—typically is stronger and more consistent than the immune response to COVID-19 infection.
- Getting vaccinated helps keep you from getting seriously ill even if you do get COVID-19. Your vaccination also may protect people around you, particularly people at increased risk for severe illness from COVID-19.
- Although many people have no symptoms or mild symptoms of COVID-19, the disease can have serious, life-threatening complications—and there is no way to know how COVID-19 will affect you. If you get sick, you could spread the disease to friends, family, and others around you.
- Even if you've had COVID-19, you will get stronger immunity from vaccination and better protection against variants. The level of protection people get from having COVID-19 may vary depending on how mild or severe their illness was, the time since their infection, and their age.

Questions for Exploring Patient Concerns

- What do you know about the differences between immunity produced by COVID-19 infection and immunity produced by a vaccine?
- What do you know about getting a vaccine after having a COVID-19 infection?
- What concerns you most about getting a COVID-19 vaccine?
- What would have to be true for you to think it was important to get a COVID-19 vaccine?
- What if I told you…? *(Provide information about the benefits of vaccination versus immunity following COVID-19 illness.)*

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What We Know

The Centers for Disease Control and Prevention (CDC) currently recommends COVID-19 vaccination for all people 6 months of age and older in the United States. This includes people who have been previously infected with SARS-CoV-2.

Vaccine-Induced Immunity vs. Infection-Induced Immunity. Public health and infectious disease experts agree that vaccination is the preferable and safer choice to build immunity against COVID-19 for people who have not been infected with SARS-CoV-2. The vaccines were designed specifically to generate an effective and reproducible immune response. Serious side effects are known to be both rare and manageable, and long-term side effects are unlikely.

The same cannot be said of COVID-19 illness. Although many people infected with SARS-CoV-2 develop a robust immune response, substantial heterogeneity exists, with a 200-fold difference in peak antibody titers noted in some studies.[1,2] The degree of immune protection may be related to both the amount of virus a person is exposed to and the severity of COVID-19 illness, with milder cases offering less protection. COVID-19 can have serious, life-threatening complications, and there is no reliable way to predict whether a person will develop severe disease. Young people are not invulnerable to serious complications; in one study of 3,222 young adults (18 to 34 years of age) in the United States who required hospitalization for COVID-19 early during the pandemic, 684 patients (21%) required intensive care, 331 (10%) required mechanical ventilation, and 88 (2.7%) died.[3] And people with milder cases of COVID-19 could spread the disease to family, friends, and others who might be at greater risk.

Additionally, even mild COVID-19 illness can result in life-disrupting "long COVID": persistent symptoms such as profound fatigue, loss of taste and smell, and brain fog that contribute to a decline in health-related quality of life. In a prospective cohort of 177 adults with laboratory-confirmed severe SARS-CoV-2 infection, persistent symptoms up to 9 months after illness onset were reported by 17 of 64 patients (26.6%) 18 to 39 years of age, 25 of 83 patients (30.1%) 40 to 64 years of age, and 13 of 30 patients (43.3%) 65 years of age or older.[4]

Vaccination Following COVID-19 Illness. Mounting evidence supports the value of vaccination after COVID-19 infection. As discussed in an October 2021 CDC Science Brief,[1] numerous immunologic studies and a growing number of epidemiologic studies have shown that vaccinating previously infected individuals significantly enhances their immune response and effectively reduces the risk of subsequent infection, including in the setting of increased circulation of more infectious variants.

A small but growing number of studies indicate that vaccinated people who are subsequently infected with COVID-19 are less likely to report symptoms of long COVID than unvaccinated people in the short term (4 weeks after infection), medium term (12 to 20 weeks after infection), and long term (6 months after infection).[5] There also is evidence that unvaccinated people with long COVID who were subsequently vaccinated had reduced long COVID symptoms and reported fewer long COVID symptoms than those who remained unvaccinated.

References

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