SF Community Medicine and Health

Vaccine: Life-Saving or Killing

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Corona-viruses (CoV) are a large family of viruses that cause illnesses ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel corona-virus (nCoV) is a new strain that has not been previously identified in humans [1].

COVID-19 symptoms include fever, cough, myalgia, and fatigue. Patients may initially experience diarrhea and nausea a few days before the fever. A small number of patients may also have headaches, hemoptysis, or be relatively asymptomatic [2].

To prevent a pandemic of this virus, humans need to make a vaccine. Vaccines save millions of lives each year and strengthen the immune system against viruses [3]. When a virus attacks the body, the immune system defends itself against the virus.

The effectiveness of a new vaccine is defined by its efficacy. In the case of COVID-19, a vaccine efficacy of 67% may be enough to slow the pandemic. Based on the results, COVID-19 vaccines are safe and effective. Millions of people in the United States have received COVID-19 vaccines [4].

The drug maker Pfizer claims that corona-virus vaccine was 95 percent effective and had no serious side effects and the data showed that the vaccine prevented mild and severe forms of Covid-19 [5].

Another vaccine is Russian vaccine called Sputnik V. The president of Russia, Vladimir Putin, claimed, "I know that this vaccine works quite effectively, forms strong immunity, and I repeat; it has passed all the needed checks [6].

According to the statements, while some people don't have any side effects after getting a COVID-19 vaccine, many people will have mild side effects after COVID-19 vaccination, like pain or swelling at the injection site, a headache, chills, or fever. These reactions are normal and show the vaccine is working. A small number of people have had a severe allergic reaction (called "anaphylaxis") after vaccination, but this is extremely rare and when it does happen, vaccination providers have medicines available that they can use to treat the reaction. Also people will be asked to stay for 15-30 minutes after getting vaccine [7].

As COVID-19 is new to humankind, it is unclear which vaccine strategies will be most successful. Also, because the corona-virus is unknown and not enough information is currently available, it is difficult to know if the corona-virus vaccine can prevent a person from becoming infected after being vaccinated. In other hand, some studies show that COVID-19 vaccines are effective at keeping you from getting COVID-19. But it can be difficult to know which sources of information you can trust.

Based on above mentioned points, it seems that there is no specific evidence that the corona-virus will be killed by the vaccine and the person did not become infected again after receiving the vaccine. We also don't yet know whether getting a COVID-19 vaccine will prevent you from spreading the virus that causes COVID-19 to other people. So it seems we still have to follow the protocols such as emphasis on social distancing and wearing mask.

References

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