

COVID-19 Vaccine, Myths, and Facts

Sidrah Saleem¹

¹ Professor and Head of Microbiology Department, University of Health Sciences, Lahore.

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Coronavirus pandemic has taken millions of lives worldwide. There was a period with no hope, but as time passed, humanity saw hope in the form of the vaccine. The good news is there finally, as a result of collaboration between scientists and pharmaceutical companies many vaccines have been developed and massive immunization programmes have been in effect. However, there has been some misinformation regarding COVID-19 vaccine formulations, uses, side effects, and effectiveness. Since the day of vaccine development, some people are excited to get vaccinated whereas others are afraid of having it. There are certain myths about the COVID-19 vaccine which as a researcher in the field of microbiology/immunology, I feel need some clarification.

First of all, it is common thinking that the vaccine has been developed in less time and is still in phase three trials so it might be unsafe for clinical use. This is not true, the fact is that the COVID-19 vaccine has gone through all the essential steps of vaccine formation and the same food and drug administration processes have been ensured for its safety and efficacy too.

There are other myths too as if this vaccine contains a tracking device and it might change human DNA. Again there is no truth in it. There is an optional version of this product which contains a microchip within the syringe label; the purpose is to confirm the vaccine dose's origin. The chip itself is not injected into a recipient of the vaccine. Similarly, a vaccine will not change DNA; its function is to build the immune system by creating antibodies against the antigen that is present in the vaccine.

Another common myth is that vaccine has dangerous side effects. Well, common side effects like headache, myalgia, and chills have been experienced by the volunteers, however, severe allergic reactions were not observed in healthy individual volunteers. This is why people with a history of allergy to any drug, food,

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chemical, etc. have been excluded from the vaccine trials.

Some other questions are also raised like vaccine may affect the fertility of women. The fact is that there is an amino acid sequence shared between viral spike protein and syncytin-1 (protein in the placenta), however, it is too small to initiate an immune response that can affect pregnancy.

Another myth in people's minds is that individuals, who have had a natural infection of COVID-19 disease, do not need to get vaccinated. Again the fact, as clear from evidence across the globe, clears that the natural immunity against COVID-19 does not last longer hence and it is advised to get vaccinated when it is your turn.

It is also a common perception that wearing a mask is no longer needed once you are vaccinated. Wearing a mask, hand washing, and social distancing are required not only for COVID-19 protection, as well as these precautions, protect us from many other communicable diseases too.

One important fact about the COVID-19 vaccine is that no one can develop COVID-19 disease from the vaccine since it does not contain a live virus. However, it is possible to get infected with the virus before the vaccine has had time to protect human bodies by the formation of antibodies.

Some other myths are also needed to be clarified here like people who have fewer comorbid conditions do not develop severe symptoms of the disease, hence do not need to be vaccinated, the answer is simple, even if one is relatively safe, and one still can acquire and spread the disease to others. So it is important to get vaccinated.

Another myth suggests that certain blood groups are least likely to develop severe symptoms of the diseases hence vaccine is not essential for such people. Again, no evidence is available that supports this myth. Similarly, this vaccine or any other FDA-approved

vaccine can make you positive for viral detection test in PCR.

Research on the COVID-19 vaccine will continue and will reveal more facts and dissolve many myths. It is advised to participate in getting yourself vaccinated to protect not only you but your family and community as well.

Reference

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