

Pros and Cons of Covid-19 Vaccines – an editorial

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The world is in the midst of a COVID-19 pandemic. Till now there is no effective treatment of this disease; what we have that is a magic tool- vaccine.

As of February 2021, ten vaccines are authorized by at least one national regulatory authority for public use: two RNA vaccines (the Pfizer–BioNTech vaccine and the Moderna vaccine), four conventional inactivated vaccines (BBIBP-CorV from Sinopharm, BBV152 from Bharat Biotech, CoronaVac from Sinovac, and WIBP from Sinopharm), three viral vector vaccines (Sputnik V from the Gamaleya Research Institute, the Oxford–AstraZeneca vaccine, and Ad5-nCoV from CanSino Biologics), and one peptide vaccine (EpiVacCorona from the Vector Institute).¹

These COVID-19 vaccines varies in their efficacy. The Oxford–AstraZeneca vaccine used in Bangladesh was found to be about 52 percent effective after the first dose and 92% after second dose in preventing symptomatic COVID-19 infections. However, the efficacy of Covid-19 vaccine is far better than the effectiveness of the annual flu shot (40%). So, immune response is excellent and expected to develop community or herd immunity after completion of vaccination.²

Side effects of vaccination are few including some pain at the site of injection, tiredness and headache; most side effects of the COVID-19 vaccination are mild and should not last longer than a week. Millions of people have been given a COVID-19 vaccine and report of serious side effects, such as allergic reactions, have been very rare. No long-term complications have been reported.

But it is a great task to give vaccination to vast population of a country because 70-80% of population should be covered to develop herd immunity.

Till now, it is uncertain that how long this vaccination will give protection but at present it is claimed to protect for 6-8 months after a booster vaccination. This is an assumption and based on the available data suggesting that most of those people who recover from COVID-19 develop a protective antibody titers and cellular immune response which provides protection from re-infection for 6-8 months.³

Though serious side effects, such as allergic reactions, are very rare; it should be avoided in persons who have history of severe allergic reaction to vaccines or injections in the past. Health personnel must be trained

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to handle anaphylactic reaction properly if happened.

WHO has advised people that those with some medical conditions should not get certain Covid-19 vaccines, or should wait before getting vaccine. Such warning conditions are chronic illnesses or treatments (like chemotherapy) that affect the immune system; severe and life-threatening allergies to vaccine ingredients, which are very rare; or those with severe illness and a high fever on the day of vaccination.⁴

With the hope of prevention of COVID-19, everybody should take the vaccine as well as maintain social distancing, frequent hand washing, wearing mask and avoiding social gathering till the eradication of the disease.

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