

Editorial

Should Bangladeshi Need A Covid Vaccine Booster Dose?

Mushtaque Ahmed

¹Department of Microbiology, Popular Medical College, Dhaka, Bangladesh.

At present Covid-19 has spread in most of the countries in the world killing almost >5 million people. As it is a new disease there was no medicine to combat the condition and no vaccine to prevent the disease. However the scientists were able to come with different types of vaccines to prevent the disease. Vaccination is the most effective way to control and reduce the infection rate. Most of the vaccines produced had high effective rate; however, as these are new vaccines no one was sure how long it will be able to protect us from getting infected. Further research documented that the immunity wanes off with time^{1,2}. As all are new vaccines these were introduced in the community in descending age group. Most of the vaccines are now given to all age group except the toddlers. Already many countries have included their pediatrics population to get vaccinated as approved by FDA and WHO³.

With time the virus is mutating and producing new variants. In order to battle the condition it has been decided by WHO that a booster dose should be given to people after they complete the schedule vaccination⁴. The recommendation is to get persons getting Pfizer, Astrazeneca, Moderna and Sinovac, 3rd dose at least 6 months after getting the 2nd dose. Those receiving Johnson and Johnson are recommended to receive 3rd dose 1 month after receiving the 1st dose. Whatever the type of vaccine you may get in 1st and 2nd scheduled dose, the booster dose can be given by another type of vaccine than that was given originally. Already FDA has approved booster shot for US citizen above 18 years old⁵.

We have survived almost two years of the COVID-19 pandemic, and by this time it is estimated that our immunity, both natural and post vaccination, have declined.

Correspondence:

Mushtaque Ahmed

Mobile: 01711-739239

Email: mushtaque_nasba@yahoo.com

SARS-CoV-2 virus is still circulating in its new variant form (Delta Plus) in the world. Many countries decided to immunize their risk group population with a booster shot. Already countries like Israel, USA as well as many European countries have recommended a protocol to provide booster dose of vaccine to their high risk community⁶. Four vaccines: Pfizer, Astrazeneca, Moderna and Sinovac have been used to immunize most of the world population. They have been proved effective in reducing unwanted death from COVID-19⁷.

The 3rd dose, that is the booster dose, is recommended atleast 6 months after the 2nd dose. As mentioned earlier, vaccine shot received for the 3rd dose, may be different from that of the 1st and 2nd dose. So any type of WHO recognized vaccine may be delivered for the booster dose, that is a “mix-and-match” approach may be taken as studies suggest it to be very effective and less complicated^{8,9}.

So people in Bangladesh, especially our senior citizen above 60 years age, below 60 years with risk factors, immunocompromised individuals, health care workers and front liners in COVID-19, are recommended booster shot of the vaccine.

So we hope the Government of Bangladesh will approve and develop guidelines for booster shot to our citizens and prevent and control COVID-19 unwanted deaths and complications.

Reference

1. Mizrahi B, Lotan R, Kalkstein N, Peretz A, Perez G, Ben-Tov A, et al. Correlation of SARS-CoV-2-break-through infections to time-from-vaccine. Nature communications. 2021 Nov 4;12(1):1-5.
2. Mahase E. Covid-19: Two vaccine doses are crucial for protection against delta, study finds. 2021 Aug16;374:n2029

3. COVID-19 & boosters. Centers for Disease Control and Prevention. [Cited 2021 Nov 20]. Available from: <https://www.cdc.gov/COVID19-ch>.
4. Mahase E. Covid-19 booster vaccines: What we know and who's doing what. 2021 Aug 30;374:n2082
5. COVID-19 Vaccine booster shots. Centers for Disease Control and Prevention. [Updated 2021; cited 2021 Nov 20] Available from: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/booster-shot.html>.
6. A million Israelis get third dose, with early data showing heightened protection. Times of Israel. 2021 Aug 16.
7. COVID-19 Vaccines. World Health Organization. [Cited 2021 Nov 20]. Available from: <https://www.who.int/covid-19/vaccines>.
8. Turkey offering extra Pfizer shots for those wanting to travel. Reuters. 2021 Aug 16: Middle East.
9. Today, Uruguayans vaccinated with Coronavac can receive a Pfizer booster dose. Rio Times. 2021 Aug 16.