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Understanding how universal boosters work

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While wearing masks and practising social distancing is one way to go about it, the focus should always be on getting vaccinated and getting oneâ??s booster shots. Dr Vijay Warad, Allergist, Clinical immunologist, Paediatric pulmonologist gives an insight



As we move on from another wave of the deadly coronavirus, global healthcare infrastructures across the globe have witnessed drastic changes. The first wave pushed the pharmaceutical companies to rush the vaccine manufacturing process. Similarly, during the second wave, the delta variant made us realise the importance of having oxygen cylinders in large numbers in order to save lives. Fortunately for us, the Omicron variant was not as life-threatening as its predecessors. On the brighter side, it also helped people who got infected with the virus, to develop natural antibodies and contribute to the process of building herd immunity.

During the pandemic, we all have certainly lost our loved ones. Each wave brings in a new variant that has a more complex gene-sequencing than the previous one. With the virus constantly mutating itself, it gets difficult to protect ourselves and the people around us. Along with this, allergies like Urticaria, Eczema, rhinitis, Bronchitis, Sinusitis which were previously controlled, are taking more time to settle down amongst the non-vaccinated people.

While health experts believe that the pandemic still has a long way to go, the onus falls on us to do everything possible to stay away from getting infected. While wearing masks and practising social distancing is one way to go about it, the focus should always be on getting vaccinated and getting one's booster shots. Vaccines provide the first line of defence, but booster shots ensure that the antibody levels in our immune system remain intact. They also keep us safe from any threat posed by the newer variants. Talking about different ways of boost in defence but basically, that is given, regardless of the first 2 doses of the same vaccine. This triggers a different immune response, therefore, providing us with better antibodies to protect ourselves. This concept is also known as 'Mix & Match'.

Currently, in India, the government has given green light for people to get their 'precautionary booster' shots. With Covishield, Covaxin and Sputnik Light already in use, the government hopes to soon welcome Pfizer and Moderna as well.

Let's talk about the boosters currently in use in terms of the efficacy they provide.

- For Covishield, positive results were observed from a preliminary analysis of the ongoing safety and immunogenicity trial. It showed that Vaxzevria (COVISHIELD in India), when given as a third dose booster, increased the immune response to Beta, Delta, Alpha and Gamma SARS-CoV-2 variants.
- The Covaxin booster dose's capability to neutralize the coronavirus's highly contagious Omicron and Delta variants showed promising results in its booster dose trials with more than 90 per cent of all individuals boosted with Covaxin.
- Based on the data collected at the Italian Spallanzani Institute and results of previous studies, heterologous (mix and match) boosting with the recently approved Sputnik Light helps to increase other vaccines' efficacy and extend the booster protection period as optimal adenoviral platform configuration provides better protection against Omicron and other variants. Sputnik Light is based on recombinant human adenovirus (medium-sized, nonenveloped) serotype number 26 (the first component of Sputnik V).

The cumulative COVID-19 vaccine doses administered in the country recently crossed 178 crore which indicates that we are on the right path to fight the virus. Although vaccine hesitancy is still an issue in some parts of the country, let us all take up the responsibility to spread awareness about the benefits of getting jabbed with booster shots. Wearing masks and following social distancing will go together with the vaccination drive to ensure a safe future for us.