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Abbott unveils new four strain flu vaccine for influenza

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Sub-unit vaccines offer similar immunization benefits with better tolerability compared to other flu vaccine types, with lesser side effects

Abbott, the global healthcare company, recently launched a new inactivated quadrivalent vaccine for influenza, the first of its kind sub-unit vaccine offering protection against four virus strains, in India.

It is the only 0.5 ml quadrivalent flu vaccine in India that has been approved for use in children below 3 years. In fact, it can be given to children from 6 months onwards, and to adults. A 0.5 ml vaccine could improve the immune response in children below 3 years.

A globally approved product, Abbott's vaccine offers wide protection by immunizing against four different flu virus strains simultaneously. Hence, it is called a quadrivalent or tetravalent vaccine. It includes a second B-strain of influenza virus, compared to one B-strain included in trivalent vaccines. Recommending a vaccine can be complex for the health authorities. This is because there may be a mismatch in the vaccine strain and the circulating viral strain. Therefore, the inclusion of an additional B-strain in quadrivalent vaccines can help broaden protection.

As per a recently published study on this vaccine globally, in children, quadrivalent vaccines demonstrated superior immunogenicity or immune response compared with the alternate- lineage B-strains in trivalent vaccines, with comparable safety.

This is the first 3rd generation, quadrivalent sub-unit flu vaccine in India. A sub-unit vaccine is the most advanced flu vaccine. The benefit of a sub-unit vaccine is that it undergoes a further step of purification as compared to split vaccines, and thus is more refined. This may lead to lesser side-effects. In clinical studies conducted globally across high-risk groups including children, the elderly, pregnant women, asthmatics and diabetics, sub-unit vaccines have shown better tolerability and a favourable safety profile compared to other flu vaccine types.

An inactivated influenza vaccine is beneficial in high risk populations, since it can be given to a larger set of people, such as pregnant women, children below 2 years, older adults and immunocompromised patients.

Dr. Srirupa Das, Medical Director, Abbott India said, "We are excited with the launch of the quadrivalent version of our flu vaccine, which can be offered to both children above 6 months and adults. This particular type of vaccine provides good immune response with less side-effects. This is yet another significant step in Abbott's endeavor to protect as many people

as possible against the flu. As part of its “Mothers Against Influenza” (MAI) campaign, which recognizes the potentially serious consequences that influenza can have, Abbott is raising awareness among people on the importance of protecting families against influenza so that they may live healthier, fuller lives.”

A respiratory infection that affects all ages, influenza is distinct from the common cold. An influenza infection typically results in high fever lasting for 3 to 4 days, including symptoms such as headache, myalgia or muscle pain, exhaustion and severe chest discomfort and cough. Moreover, influenza can cause serious complications in certain groups such as those with respiratory ailments, cardiac disease and diabetes, as well as young children and the elderly. Influenza A and B, the two viruses that cause human disease, are currently circulating globally and in India causing seasonal outbreaks. The disease burden of influenza is substantial, and B viruses have been estimated to be associated with 25% of all influenza related mortality.

Dr. Bhaskar Shenoy, Head Department of Pediatrics & Chief, Division of Pediatric Infectious Disease, Manipal Hospital, Bangalore and Life Member, Infectious Disease Chapter, Indian Academy of Pediatrics said, “The National Center of Disease Control estimates show that influenza reported cases have increased 5-fold in India from 5,044 in 2012 to 28798 in 2019. And in Delhi, influenza reported cases have increased around 70% per annum from 151 in 2013 to 3627 reported cases in 2019. Vaccination is the best defense against influenza. What makes high vaccination rates so important is the ‘herd-immunity’ benefit. Widespread immunization of otherwise healthy populations may result in interruption of transmission of influenza and thereby may indirectly protect those in high-risk groups. Every day, we come in contact with the elderly, parents of children and pregnant women, all of whom could be put at risk of getting the flu virus from us. Getting a flu vaccine before influenza season is advisable, not only for you and your family, but for the entire community.”

Children are particularly vulnerable to influenza. One India study estimates over 16 million influenza cases occurred in 2016 in under-5-year-old patients, accounting for 10.9 million outpatient visits and 109,000 hospitalizations. Despite the proven benefits of influenza vaccination in children as well as adults and the elderly, immunization rates across all vaccine preventable diseases remain low.