

“We must not lose focus on maintaining high coverage rates for existing vaccines in Universal Immunisation Programme”

14 September 2022 | Interviews

In a path breaking development around healthcare in the country, the government announced CERVAVAC, the country's first indigenously developed vaccine for cervical cancer on 1st September 2022. Following this development, healthcare experts are urging for inclusion of cervical cancer vaccine in the Universal Immunisation Programme of India. Throwing more light on the current vaccine development scenario in India, BioSpectrum spoke to Dr Kuharaj Mahenthiran, Medical Head – Vaccines, India and Partner Markets, Sanofi.

How can India strengthen its vaccine portfolio with new & emerging infections setting in?

India is launching new vaccines in the Universal Immunisation Programme (UIP)-pneumococcal conjugate vaccine (PCV), human papillomavirus vaccine (HPV), etc. which are usually piloted in certain states and then launched nationwide.

However, a mainstay vaccine in the UIP, the diphtheria-tetanus-pertussis (DTP) combination vaccine has witnessed a drop in coverage rates over the past two years. This is concerning and as we look to include new vaccines in the UIP, we must not lose focus on maintaining high coverage rates that have been built over many years for the existing vaccines in UIP.

The learnings of managing the COVID-19 pandemic need to be applied to the development of future vaccines against emerging infectious diseases and possible pandemic-causing pathogens. The permanent threat of emerging pathogens calls for vigilance, surveillance, and preparedness for optimum vaccine development and deployment. Global and local health stakeholders now have the experience of making significant efforts in mobilizing partnerships to accelerate the response in providing urgent health needs to the community, which includes the rapid development and deployment of COVID-19 vaccines across the globe.

There is a wide vaccine portfolio in India, and with stronger public-private partnerships, optimum delivery of vaccines will be able to take place across the various states and territories in the country. The accelerated regulatory approvals of COVID-19 vaccines and the resultant decrease in market time have helped in the timely availability of these vaccines to the public. A

review of funding, operational, technological, and regulatory aspects will allow for further optimization of vaccine development and deployment to the market in the future

Given that the pandemic has caused a disruption in the routine immunisation programme, do you think if public and private sectors come together, this will help?

Utilisation of the knowledge and resources of both public and private sectors has been critical in the fight against COVID-19. It is accurate to state that without public-private partnerships (PPPs), the development and deployment of various types of COVID-19 vaccines globally would not have occurred at the optimum time. With the growing global demand for vaccine needs and the rise in cases of multiple vaccine-preventable infectious diseases, there is an important need for a stronger PPP to optimise vaccine development and deployment at a higher scale in the near future.

Understanding disease burden is important. Do you think surveillance of Vaccine Preventable Diseases (VPD) can be of help?

Surveillance of VPDs provides countries with vital information to understand disease burden and epidemiology, and then develop information-based vaccination strategies.

The World Health Organization Strategic Advisory Group of Experts (WHO SAGE) on immunisation recommends surveillance for all VPDs. It is also stated that a vaccine with the proven potential to reduce morbidity and mortality should be introduced or continued even if the country does not yet do surveillance for a VPD.

An example of a successful outcome of strong VPD surveillance in India is the elimination of polio, with the last reported polio case being in January 2011. Implementation of a strong surveillance system for polio generated useful, timely and accurate data to guide policies, strategies and interventions until transmission of the poliovirus was interrupted in the country, resulting in India receiving 'Polio-free certification' from WHO on March 2014.

What are the recent trends & challenges of the Indian vaccine market?

India is the world's largest supplier of vaccines. The Indian pharmaceutical industry is expected to grow to \$65 billion by 2024, despite significant export production growth. The global vaccine market is expected to reach \$86.2 billion in 2027.

Increasing government support and attention to vaccine & immunisation development, along with the increasing prevalence of infectious diseases, are driving the vaccine market. Public health challenges related to influenza remain among the greatest in the world. Globally, 1 billion influenza cases occur each year, of which 3 million to 5 million are severe, resulting in 290 000 to 650 000 deaths due to influenza, thus a Global Influenza Strategy 2019-2030 exists. This is an area that gives a lot of scope to the pharmaceutical sector.

Inequitable access to vaccines is a challenge that perpetuates the implications of disrupted routine immunisation. A significant investment in vaccination programmes and research is needed to prepare us for the future.

Dr Manbeena Chawla

(manbeena.chawla@mmactiv.com)