Global Vaccine Market Report 2022

For Prelims: Vaccine Inequity, World Health Organisation, Covid-19, Global Vaccine Market Report 2022, Immunization Agenda 2030 (IA2030)

For Mains: Issue of Vaccine Inequity, Challenges and Solutions

Why in News?

Recently, the World Health Organisation (WHO) released 'Global Vaccine Market Report 2022'.

 This is the first report to capture the implications of <u>Covid-19</u> for vaccine markets he Vision highlighting the issue of vaccine inequity.

What are the Findings of the Report?

- Vaccine Inequity, not a Unique Phenomenon:
 - It shows that inequitable distribution is not unique to Covid-19 vaccines, with lowincome countries consistently struggling to access vaccines that are in-demand by highincome countries. Limited vaccine supply and unequal distribution drive global disparities.
 - The human papillomavirus (HPV) vaccine against cervical cancer has only been introduced in 41% of low-income countries, even though they represent much of the disease burden, compared to 83% of high-income countries.
- Price Disparities:
 - Affordability is a major obstacle to vaccine access. While prices tend to be tiered by income, price disparities see middle-income countries paying as much - or even more than wealthier ones for several vaccine products.
- Free-Market Dynamics:
 - Free market dynamics is depriving some of the world's poorest and most vulnerable people of their right to health. Therefore, changes are much needed to the global vaccine market to save lives, prevent disease and prepare for future crises.
- Scale-up during Health Emergencies:
 - Approximately 16 billion vaccine doses, worth US\$ 141 billion, were supplied in 2021, almost three times the 2019 market volume (5.8 billion) and nearly three-and-a-half times the 2019 market value (US\$ 38 billion).
 - The increase was primarily driven by Covid-19 vaccines, showing the incredible potential of how vaccine manufacturing can be scaled up in response to health needs.
- Concentrated Manufacturing Base:
 - Although manufacturing capacity worldwide has increased, it remains highly concentrated.
 - Ten manufacturers alone provide 70% of vaccine doses (excluding COVID-19).
 - Several of the top 20 most widely used vaccines (such as PCV, HPV, measles and rubella containing vaccines) each currently rely mainly on two suppliers.
 - In 2021, the African and Eastern Mediterranean regions were dependent on

- This concentrated manufacturing base leads to risk of shortages as well as regional supply insecurity.
- Entrenched intellectual property monopolies and limited technology transfer
- further limit the ability of building and using local manufacturing capacity.
- Limited Investment in Vaccines Other than Covid-19:
 - The health of markets is also concerning for several of the vaccines commonly needed for emergencies, such as against cholera, typhoid, smallpox/monkeypox, Ebola, meningococcal disease, where demand surges with outbreaks and is hence less predictable.
 - The continued limited investment in these vaccines could be devastating for people's lives.
- Immunization Agenda 2030 (IA2030):
 - The report highlights the opportunities for more alignment of vaccine development, production and distribution with a public health agenda, towards achieving the Immunization Agenda 2030 (IA2030) goals and informing pandemic prevention, preparedness, and response efforts.

What are the Recommendations of the Report?

- For Governments:
 - Frame clear immunization plans and more aggressive investment
 - Get a stronger oversight of vaccine development, production and distribution
 - Emphasise on regional research and manufacturing hubs
 - Devise pre-agreeing rules for government collaboration in times of scarcity on issues such as vaccine distribution, intellectual property and the circulation of inputs and goods. The Visit
- For Industry:
 - Focus on research efforts for WHO priority pathogens
 - Ensure transparency.
 - Facilitate technology transfer.
 - Commit to specific equity-driven allocation measures.
- For International Organizations and Partners:
 - Prioritize Immunization Agenda 2030 goals.
 - Support country-driven initiatives.
 - Push for the application of resolutions on market transparency.

UPSC Civil Services Examination, Previous Year Questions (PYQ)

Prelims

Q. In the context of vaccines manufactured to prevent COVID-19 pandemic, consider the following statements: (2022)

- 1. The Serum Institute of India produced COVID-19 vaccine named Covishield using mRNA platform.
- 2. Sputnik V vaccine is manufactured using vector based platform.
- 3. COVAXIN is an inactivated pathogen based vaccine.

Which of the statements given above are correct?

(a) 1 and 2 only

- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (b)

Exp:

COVISHIELD vaccine is based on the platform which uses a recombinant, replication-deficient

chimpanzee adenovirus vector encoding the SARS-CoV-2 Spike (S) glycoprotein. Following administration, the genetic material of part of coronavirus is expressed which stimulates an immune response. **Hence, statement 1 is not correct.**

- Sputnik V is the world's first registered vaccine based on a well-studied human adenovirus vector platform. It has been approved for use in 71 countries with a total population of 4 billion people. The vaccine is named after the first Soviet space satellite. The vaccine's efficacy is 97.6%, based on the analysis of data on the incidence of coronavirus among Russians vaccinated with both vaccine components between December 5, 2020 and March 31, 2021. Hence, statement 2 is correct.
- Covaxin is an inactivated viral vaccine. This vaccine is developed with Whole-Virion Inactivated Vero Cell-derived technology. They contain inactivated viruses, which cannot infect a person but still can teach the immune system to prepare a defence mechanism against the active virus. Hence, statement 3 is correct.

The Vision

• Therefore, option B is correct.

<u>Mains</u>

Q. What is the basic principle behind vaccine development? How do vaccines work? What approaches were adopted by the Indian vaccine manufacturers to produce COVID-19 vaccines? **(2022)**

Source: DTE

PDF Refernece URL: https://www.drishtiias.com/printpdf/global-vaccine-market-report-2022