Global Virtual vaccine summit – GAVI and India’s Immunisation programme

Part of: GS-III- Health (PT-MAINS-PERSONALITY TEST)

PM Modi said this while addressing the virtual Global Vaccine Summit hosted by UK Prime Minister Boris Johnson in which over 50 countries - business leaders, UN agencies, civil society, government ministers, Heads of State and country leaders participated.

Imp Points

- He said, India’s civilization teaches to see the world as one family and that during this pandemic it had tried to live up to this teaching.
- He also said India did it so by sharing the country’s available stocks of medicines with over 120 countries, by forging a common response strategy in its immediate neighborhood and by providing specific support to countries that sought it, while also protecting India’s own vast population.
- India pledged 15 Million US Dollars to GAVI, the international vaccine alliance.
- Referring to GAVI, PM Modi said it is not just a global alliance but also a symbol of global solidarity and a reminder of that by helping others we can also help ourselves.
- The Prime Minister said India has a vast population and limited health facilities and that it understands the importance of immunization.
- He added that one of the first programmes launched by his government was Mission Indradhanush, which aims to ensure full vaccination of the country’s children and pregnant women, including those in the remote parts of the vast nation.
- He also said in order to expand protection, India has added six new vaccines to its National Immunization.
- India had digitized its entire vaccine supply line and developed an electronic vaccine intelligence network to monitor the integrity of its cold chain.
- India is also the World’s foremost producer of vaccines and that it is fortunate to contribute to the immunization of about 60 percent of the World’s children.
- India recognizes and values the work of GAVI, that is why it became a donor to GAVI while still being eligible for GAVI support.

The Prime Minister said India’s support to GAVI is not only financial but that India’s huge demand also brings down the Global price of vaccines for all, saving almost 400 Million Dollars for GAVI over the past five years. India stands in solidarity with the world along with its proven capacity to produce quality medicines and vaccines at low cost, its own domestic experience in rapidly expanding immunization and its considerable scientific research talent.

Immunisation program in India

What

Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines stimulate the
Immunization is a proven tool for controlling and eliminating life-threatening infectious diseases and is estimated to avert between 2 and 3 million deaths each year. It is one of the most cost-effective health investments, with proven strategies that make it accessible to even the most hard-to-reach and vulnerable populations. It has clearly defined target groups; it can be delivered effectively through outreach activities; and vaccination does not require any major lifestyle change.

**Universal Immunisation Programme**

Immunization Programme in India was introduced in 1978 as ‘Expanded Programme of Immunization’ (EPI) by the Ministry of Health and Family Welfare, Government of India. In 1985, the programme was modified as ‘Universal Immunization Programme’ (UIP) (PT) to be implemented in phased manner to cover all districts in the country by 1989-90 with the one of largest health programme in the world. Ministry of Health and Family Welfare, Government of India provides several vaccines to infants, children and pregnant women through the Universal Immunisation Programme.

The program now consists of vaccination for 12 diseases- tuberculosis, diphtheria, pertussis (whooping cough), tetanus, poliomyelitis, measles, hepatitis B, diarrhoea, japanese encephalitis, rubella, pneumonia (haemophilus influenzae type B) and Pneumococcal diseases (pneumococcal pneumonia and meningitis). Hepatitis B and Pneumococcal diseases was added to the UIP in 2007 and 2017 respectively.

**Vaccines provided under UIP:**

**BCG**
- About- BCG stands for Bacillus Calmette-Guerin vaccine. It is given to infants to protect them from tubercular meningitis and disseminated TB.
- When to give – BCG vaccine is given at birth or as early as possible till 1 year of age.
- Route and site- BCG is given as intradermal injection in left upper arm.

**OPV**
- About- OPV stands for Oral Polio Vaccine. It protects children from polio.
- When to give- OPV is given at birth called zero dose and three doses are given at 6, 10 and 14 weeks. A booster dose is given at 16-24 months of age.
- Route and site - OPV is given orally in the form of two drops.

**Hepatitis B vaccine**
- About – Hepatitis B vaccine protects from Hepatitis B virus infection.
- When to give- Hepatitis B vaccine is given at birth or as early as possible within 24 hours.
Subsequently 3 doses are given at 6, 10 and 14 weeks in combination with DPT and Hib in the form of pentavalent vaccine.

• Route and site- Intramuscular injection is given at anterolateral side of mid thigh

**Pentavalent Vaccine**

• About- Pentavalent vaccine is a combined vaccine to protect children from five diseases Diptheria, Tetanus, Pertusis, Haemophilis influenza type b infection and Hepatitis B.
  • When to give - Three doses are given at 6, 10 and 14 weeks of age (can be given till one year of age).
  • Route and site- Pentavalent vaccine is given intramuscularly on anterolateral side of mid thigh

**Rotavirus Vaccine**

• About - RVV stands for Rotavirus vaccine. It gives protection to infants and children against rotavirus diarrhoea. It is given in select states.
  • When to give - Three doses of vaccine are given at 6, 10, 14 weeks of age.
  • Route and site- 5 drops of vaccine are given orally.

**PCV**

• About- PCV stands for Pneumococcal Conjugate Vaccine. It protects infants and young children against disease caused by the bacterium Streptococcus pneumoniae. It is given in select states.
  • When to give - The vaccine is given as two primary doses at 6 & 14 weeks of age followed by a booster dose at 9 months of age
  • Route and site- PCV is given as intramuscular (IM) injection in outer right upper thigh. It should be noted that pentavalent vaccine and PCV are given as two separate injections into opposite thighs.

**fIPV**

• About- fIPV stands for Fractional Inactivated Poliomyelitis Vaccine. It is used to boost the protection against poliomyelitis.
  • When to give- Two fractional doses of IVP are given intradermally at 6 and 14 weeks of age.
  • Route and site- It is given as intradermal injection at right upper arm.

**Measles/ MR vaccine**

• About- Measles vaccine is used to protect children from measles. In few states Measles and Rubella a combined vaccine is given to protect from Measles and Rubella infection.
  • When to given- First dose of Measles or MR vaccine is given at 9 completed months to 12 months (vaccine can be given up to 5 years if not given at 9-12 months age) and second dose is given at 16-24 months.
  • Route and site – Measles Vaccine is given as subcutaneous injection in right upper arm.
JE vaccine

- About: JE stands for Japanese encephalitis vaccine. It gives protection against Japanese Encephalitis disease. JE vaccine is given in select districts endemic for JE.

- When to give: JE vaccine is given in two doses; first dose is given at 9 completed months-12 months of age and second dose at 16-24 months of age.

- Route and site: It is given as subcutaneous injection.

DPT booster

- About: DPT is a combined vaccine; it protects children from Diphtheria, Tetanus and Pertussis.

- When to give: DPT vaccine is given at 16-24 months of age is called as DPT first booster and DPT 2nd booster is given at 5-6 years of age.

- Route and site: DPT first booster is given as intramuscular injection in antero-lateral side of mid thigh in left leg. DPT second booster is given as intramuscular injection in left upper arm.

TT

- About: Tetanus toxoid vaccine is used to provide protection against tetanus.

- When to give: Tetanus toxoid vaccine is given at 10 years and 15 years of age when previous injections of pentavalent vaccine and DPT vaccine are given at scheduled age.

- Pregnant women: TT-1 is given early in pregnancy; and TT-2 is given 4 weeks after TT-1. TT booster is given when two doses of TT are given in a pregnancy in last three years.

- Route and site: TT is given as Intramuscular injection in upper arm.

Mission Indradhanush

Mission Indradhanush was launched by the Ministry of Health and Family Welfare, Government of India on December 25, 2014. Between 2009-2013 immunization coverage has increased from 61% to 65%, indicating only 1% increase in coverage every year. To accelerate the process of immunization by covering 5% and more children every year, Indradhanush mission has been adopted to achieve target of full coverage by 2020.

The Mission Indradhanush aims to cover all those children by 2020 who are either unvaccinated, or are partially vaccinated against vaccine preventable diseases.

Four phases of Mission Indradhanush have been conducted till August 2017 and more than 2.53 crore children and 68 lakh pregnant women have been vaccinated.

The following areas are targeted through special immunization campaigns:

- High risk areas identified by the polio eradication programme. These include populations living in areas such as:
  - Urban slums with migration
  - Nomads
Brick kilns Construction sites
Other migrants (fisherman villages, riverine areas with shifting populations etc.) and Underserved and hard to reach populations (forested and tribal populations etc.
Areas with low routine immunization (RI) coverage (pockets with Measles/vaccine preventable disease (VPD) outbreaks).
Areas with vacant sub-centers: No ANM posted for more than three months.
Areas with missed Routine Immunisation (RI) sessions: ANMs on long leave and similar reasons
Small villages, hamlets, dhanis or purbas clubbed with another village for RI sessions and not having independent RI sessions.

Intensified Mission Indradhanush (IMI)

To further intensify the immunization programme, Prime Minister launched the Intensified Mission Indradhanush (IMI) on October 8, 2017. Through this programme, Government of India aims to reach each and every child up to two years of age and all those pregnant women who have been left uncovered under the routine immunisation programme/UIP. The focus of special drive was to improve immunisation coverage in select districts and cities to ensure full immunisation to more than 90% by December 2018.

Special attention was given to unserved/low coverage pockets in sub-centre and urban slums with migratory population. The focus was also on the urban settlements and cities identified under National Urban Health Mission (NUHM).

Intensified Mission Indradhanush (IMI) 2.0

To boost the routine immunization coverage in the country, Government of India has introduced Intensified Mission Indradhanush 2.0 to ensure reaching the unreached with all available vaccines and accelerate the coverage of children and pregnant women in the identified districts and blocks from December 2019-March 2020.

The IMI 2.0 aims to achieve targets of full immunization coverage in 272 districts in 27 States and at block level (652 blocks) in Uttar Pradesh and Bihar among hard-to-reach and tribal populations.

With the launch of Intensified Mission Indradhanush 2.0, India has the opportunity to achieve further reductions in deaths among children under five years of age, and achieve the Sustainable Development Goal of ending preventable child deaths by 2030.