



SNS COLLEGE OF ALLIED HEALTH SCIENCES
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DEPARTMENT: ALLIED HEALTH SCIENCES
COURSE NAME: PEADIATRIC

Topic:Pulse polio Immunization



Introduction



Following the global polio eradication initiative of WHO in 1988, the Indian government launched the pulse polio immunization (PPI) programme in 1995.

- Under this programme all children under 5 years are to be administered 2 doses of OPV in December and January, until polio is eradicated
- 6.5 lac polio booths
- 125 Million kids were administered on each immunization day

Key objectives

- Not a single child should miss the immunization and leaves any chance to Polio occurrence. Cases of Acute Flaccid Paralysis (AFP) be reported completely in time and Stool specimens collected within 14 days and Outbreak Response Immunization (ORI) conducted as early as possible.



Poliomyelitis



- A viral disease which may affect the spinal cord causing muscle weakness and paralysis.
- The virus enters the body through the mouth, usually from hands contaminated of an infected person.
- 3 types: Spinal, Bulbar and Bulbospinal Disease is more common in the summer It is primarily an intestinal infection that causes paralysis in less than 1% of cases (Link 86).



Etiology



- The polio is caused by poliovirus.
- The poliovirus is a member of a large family known as Picornaviruses, Rhinoviruses.
- Polio belongs to enteroviruses subgroup which consists 70 viruses of intestine.
- It is one of the smallest RNA viruses.
- Incubation Period is between - 3 to days.
- Period of communicability is to 10 days.
- Favorable environment is in the Rainy Season.



Pulse Polio Immunization Aims



- Replacement of wild Poliovirus in the community. Intensified Pulse Polio Immunization Programme.
- All children under the 5 year should be vaccinated. NGO should be opened.
- There should be three zones- Low burden, middle burden, high burden.
- Wild Poliovirus transmission is limited to a Focal area. To interrupt transmission of wild polio virus as soon as possible.



Challenges faced by Indian Government



- The size of the campaign (6.5 lakh polio booths; 125 million children to be Administered on each immunization day; IEC, cold chain and vaccine management)
- Funding Political commitment
- Weak infrastructure
- Lack of health services
- The attitudinal diversity (diverse religious, socioeconomic and cultural background)
- Management of Human Resources (Doctors, Nurses, Health, Anganawadi Workers, School Teachers and Students, Volunteers, NGOs)



Strategies adopted



- Immunizing every child below 1 year with at least 3 doses of OPV.
- National Immunization Days during which every child below 5 years gets 2 additional doses of OPV on 2 days separated by 4 to 6 weeks.
- Surveillance of AFP to identify all reservoirs of wild poliovirus transmission.
- Extensive house-to-house immunization mopping-up campaigns in the final stages where wild poliovirus transmission persists.



Polio Eradication and Endgame Strategic plan 2013-2018



1. To detect and interrupt poliovirus transmission
2. To strengthen immunization systems and withdraw oral polio vaccine
3. To contain poliovirus and certify interruption of transmission
4. To plan how to utilize the legacy of the fight against polio



Polio Surveillance



1- Acute flaccid paralysis surveillance

2- Environmental surveillance

Acute flaccid paralysis surveillance •

1. Finding and reporting children with acute flaccid paralysis (AFP)
2. Transporting stool samples for analysis
3. Isolating poliovirus
4. Mapping the virus

Environmental surveillance

Environmental surveillance involves testing sewage or other environmental samples for the presence of poliovirus.



Mass Immunization campaign (Pulse Polio Immunization)



Pulse- Sudden, mass administration of OPV on a single days to all children 0-5 years of age irrespective of their previous polio vaccination status

It is additional to routine immunization

Also known as NIDs (National Immunization Days)