

Name: Urooba Shafique

Roll No: 32625

(Online Batch 59)

Subject: GSA Majid Raza Chaudary

Submitted to: Sir ~~Majid Raza Chaudary~~

ASSIGNMENT 1:

POLIO → Definition, Symptoms, Cause, Prevention and Treatment.

DEFINITION OF POLIO

The word Polio also known as "Poliomyelitis" derives from Greek words which refers to inflammation (itis) of the gray (polios) matter of the spinal cord (myelos). It is a highly infectious viral disease often resulting in paralysis. The infection chiefly affects children and young adults and is caused by any of three related viruses called polioviruses.

Polio cases have decreased by over 99% since 1988, from an estimated 3,50,000 cases then, to 74 reported cases in 2015. The

reduction is the result of the global effort to eradicate the disease. There are just two countries which have been unable to stop transmission of Polio. The two countries are Pakistan and Afghanistan. They face a lot of challenges such as insecurity, weak health systems and poor sanitation.

SYMPTOMS OF POLIO:

Polio is a highly infectious disease caused by a virus. It invades the nervous system, and can cause total paralysis in the matter of hours. Initial symptoms are fever, fatigue, headache, vomiting and stiffness in the neck and pain in the limbs. One in 200 infections leads to irreversible paralysis (usually in the legs). Among those paralysed, 5% to 10% die when their breathing system become immobilized.

CAUSES OF POLIO:

Three types of polioviruses have been identified to cause polio.

- Type 1 (Brunhilde): Most common and closely associated with polio's more severe, paralytic progression.
- Type 2 (Lansing)
- Type 3 (Leon)

Poliovirus spreads in human faeces. People become infected with the virus through contaminated food and water, specially in areas where sanitation and hygiene are poor. Poliovirus typically enters the body through the mouth and proceeds through the digestive tract to the intestines. After multiplying in the body, the virus is shed in human faeces, from which it can spread and cause further infections, specially when infected people do not wash their hands and touch food or other people. Adults can become infected by changing the diapers of an infected infant.

PREVENTION:

There is no cure for polio, it can only be prevented. Immunization with polio vaccine is the best way to prevent polio. Vaccines work by exposing the body's immune

System
Strong ex
response bu
result in full
to the infection
produces antib
infectious ag
overcome the
infection, the
and quickly
invasion by

TREATMENT

vaccines that
Inactivated P
Oral Polio Vac
an injection
on age. OPV
people shou
are childr
with four o

- > A doze at
- > A doze at
- > A doze at
- > A doze a
- > A boou

system to a microbial infection that is strong enough to provoke an immune response but not severe enough to result in full-blown illness. In response to the infection, the immune system produces antibodies to fight the infectious agent. Once the body has overcome the challenge of vaccine-induced infection, the antibodies can recognize and quickly handle any subsequent invasion by the same agent.

TREATMENT:

There are two types of vaccines that protect against polio: Inactivated Polio Vaccine (IPV) and Oral Polio Vaccine (OPV). IPV is given as an injection in the leg or arm, depending on age. OPV is taken by mouth. Most people should get polio vaccine when they are children. Children should be vaccinated with four doses of (IPV) at the following stages:

- A dose at 2 months
- A dose at 4 months
- A dose at 6-18 months
- A booster dose at 4-6 years.