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Assignment #01

Date : 09/12/2023

TOPIC : POLIO

### Definition:

Polio, formally known as poliomyelitis, is a highly contagious viral infection caused by the poliovirus. It primarily affects young children and can lead to paralysis, muscle weakness, and, in severe cases, permanent disability or death. The virus primarily spreads through person-to-person contact via fecal-oral transmission or respiratory droplets.

### Symptoms:

Polio manifests in various ways. Most infected individuals about 90% exhibit no symptoms, referred to as asymptomatic polio. For those who do show symptoms, initial signs might resemble those of the flu, such as fever, sore throat, headache, fatigue, and nausea. In some cases, the virus invades the nervous system, leading to more severe symptoms like muscle weakness, stiffness in the neck and back, and, in the worst cases, paralysis.

### Causes:

The poliovirus, belonging to the Enterovirus genus, is the root cause of polio. It primarily spreads through the fecal-oral route or respiratory droplets from an infected person. Poor sanitation and hygiene practices contribute to its transmission.

### Treatment:

Presently, there is no cure for polio. Treatment mainly focuses on alleviating symptoms, providing supportive care, and preventing complications.

This includes bed rest, pain management, physical therapy, and for paralysis cases, orthopedic interventions. Ventilators might be required for individuals with respiratory paralysis.

### Preventive Measures:

Vaccination is the most effective method to prevent polio. The polio vaccine comes in two primary forms: the inactivated poliovirus vaccine (IPV) and the oral poliovirus vaccine (OPV). These vaccines have significantly reduced polio cases worldwide. Additionally, maintaining good hygiene, such as regular handwashing, ensuring safe water sources, and proper sewage disposal, helps prevent the spread of the virus.