

What is diarrhoea, mention symptoms, causes and treatment.

Diarrhea

(Definition, Causes, Symptoms, Treatment)

DIARRHEA:

Diarrhoeal disease is the leading cause of death in children under 5 years old. It kills around 5,25,000 children under 5 each year. (WHO Report)

DEFINITION

WHO defines Diarrhea as:

"The passage of three or more loose liquid stools per day."

Diarrhea refers to loose watery stools that occur more frequently than usual. It is usually a symptom of an intestinal tract infection, caused by a variety of bacterial, viral, and parasitic organisms.

TYPES OF DIARRHEA:

- 1) Acute watery diarrhea that lasts several hours, or days, including cholera.
- 2) Acute bloody diarrhea (Dysentery)
- 3) Persistent diarrhea (lasts 14 days)

SIGNS AND SYMPTOMS

Diarrhoeal disease — a leading

cause of child mortality mainly occur through contaminated food and lack of sanitation and has various signs and symptoms such as:

- a) Frequent, loose, watery stools
- b) Abdominal cramps & pain
- c) Fever above 102°F .
- d) Blood in the stool
- e) Nausea, Vomiting, Bloating

CAUSES

1) INFECTION:

Diarrhea is majorly caused by a host of bacterial, viral, and parasitic organisms which are spread by contaminated food and water. Shortage of adequate sanitation, and safe water for drinking, and cooking are common causes of diarrheal infection. Viral diarrhea is caused by Rotavirus and Norovirus, while Bacterial diarrhea is caused by Clostridium and Campylobacter.

2) MALNUTRITION:

Children who suffer from malnutrition are more vulnerable to diarrhea. According to WHO:

"Diarrhea is a leading cause of malnutrition in the children under 5 years.

3) Sources:

- a) Water contaminated with human faeces can cause diarrhea.
- b) Food prepared under unhygienic conditions
- c) Fish and seafood from polluted water
- d) People having lactose intolerance can experience diarrhea. Lactose is a sugar found in milk and other dairy products.
- e) Artificial sweeteners like Sorbitol and Mannitol can also be the cause

PREVENTION:

- 1) Access to safe drinking water
- 2) Use of improved sanitation
- 3) Handwashing with soap
- 4) Exclusive breastfeeding for first 6 months of life.
- 5) Rotavirus vaccination

TREATMENT:

- 1) Rehydration: With Oral Rehydration Salts (ORS) Solution. ORS is a mixture of clean water, salt, and sugar that is absorbed in small intestine and replaces the water & electrolyte stored in faeces.

DENGUE

What is dengue fever. Explain its causes, symptoms, prevention, and treatment

Research estimates that nearly 400 million people get infected with dengue each year, but about 80% have no symptoms. Dengue is a viral infection caused by the Dengue Virus, transmitted to humans through the bite of infected mosquitoes. Dengue virus is transmitted by female mosquitoes mainly of the species "Aedes Aegypti;" which also transmits Chikungunya, yellow fever and Zika infection. The incidence of dengue has grown dramatically around the world with cases reported to WHO increased from 5,05430 cases in 2000 to 5.2 million in 2019."

SIGNS / SYMPTOMS

- High fever ($40^{\circ}\text{C} / 104^{\circ}\text{F}$)
- Severe headache
- Pain behind the eyes
- Muscles & joints pain
- Nausea and Vomiting
- Severe abdominal pain
- Fatigue & restlessness
- Blood in vomit or stool

Symptoms usually last for 2-7 days, after an incubation period of 4-10 days after the bite from an infected mosquito.

CAUSES

TRANSMISSION THROUGH MOSQUITO

Dengue fever is caused by any of four types of dengue viruses. Spread through mosquito bites. When a mosquito bites a person infected with dengue virus, the virus enters the mosquito. Then, when the infected mosquito bites another person, the virus enters that person's bloodstream and causes an infection.

After virus incubation for 4-10 days, an infected mosquito is capable of transmitting the virus for the rest of its life.

Habitat of Aedes Aegypti: It lives in urban habitats. Unlike other mosquitoes, it is a daytime feeder; its peak biting periods are early in the morning and in the evening before dusk. Female *Aedes Aegypti* bites multiple people during each feeding period.

DIAGNOSTICS AND IMMUNIZATION:

Acetaminophen (paracetamol) is often used to control pain.

