

# ENTERIC FEVER/TYPHOID FEVER

- Typhoid fever is a severe bacterial infection caused by **salmonella typhi**, spread through contaminated food or water.
- **Source of Infection:** Spread by consuming food or water contaminated with Feces, urine of an infected person.
- **Host Factors**
- Male > female. But carrier rate more in female.
- 5-19 years children are more effective.
- All ages are susceptible.
- **Incubation Period**
- 10–14 days.

# Clinical Features

- Pea soup diarrhea
- Splenomegaly, relative bradycardia, abdominal distension and tenderness.
- Rose spots (2nd week) on chest and abdomen
- Fever 103° to 104°F
- Weakness, headache, loss of appetite
- Fever ascends in step ladder fashion, reaches normal after 7-10 days.
- Intestinal perforation (3rd week) may be one of the complications
- Onset: Typically, 1 to 3 weeks after exposure

# Drug of Choice for Cases

- Antibiotics are crucial : Complete the full course even if feeling better e.g. Cephalosporins (Ceftriaxone).
- **Immunization of Typhoid**
- **TYPHORAL (Live oral Ty21a) Vaccine**
- Contains > 10 viable organism of attenuated *S. typhi*
- **Schedule:** One capsule—1,3,4 days (booster of 3 doses once every 3 years)
- **TYPHIM Vi Vaccine**
- Not given in age < 2 years
- Vi-Polysaccharide containing single dose I/m or S/c.

# Prevention:

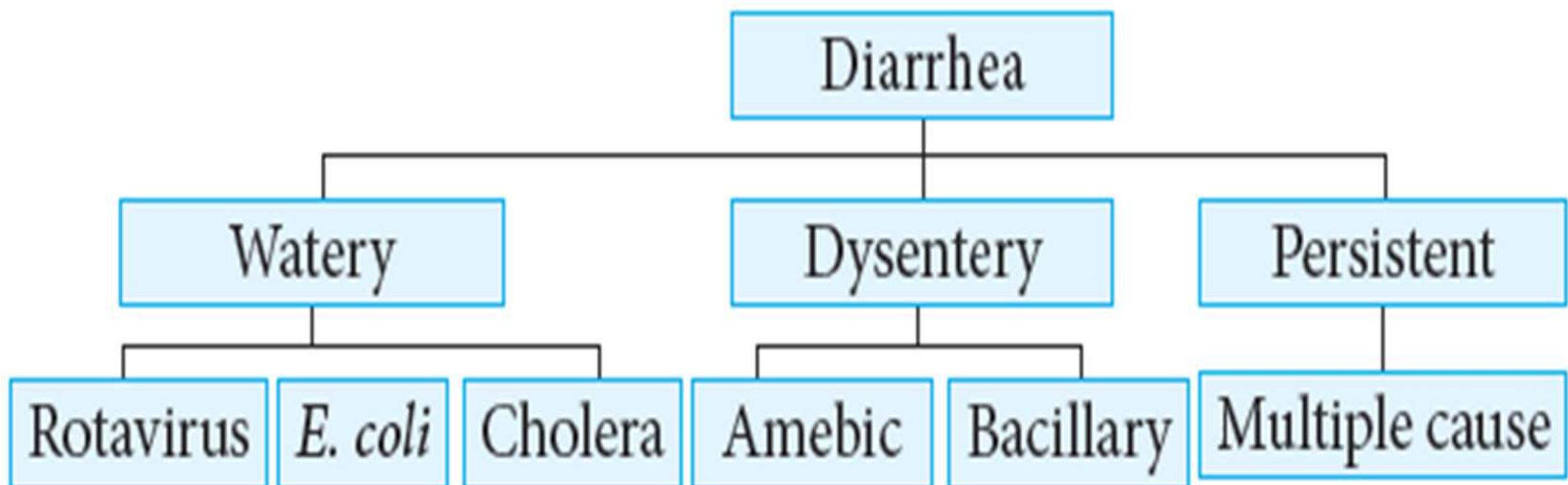
- Wash hand thoroughly with soap and water
- Drink bottled ,boiled , or treated water
- Eat food that is thoroughly cooked and served hot; avoid raw produce and unpasteurized dairy.
- Get vaccinated especially before travelling to high-risk areas.

# DIARRHEA

## Introduction

- Diarrhea is defined as passage of unusually loose or watery stools usually at least three times in a 24 hours period (WHO).
- For adults stool weight  $>200\text{ g/d}$  can generally be considered diarrheal.
- Passage of even one large watery stool in young child is diarrhea.
- Frequent passage of normal stool is no diarrhea

# Types and Causes Based on Clinical Syndrome



# Transmission

- Most of the diarrheal agents are transmitted by the fecal-oral route.
- **Cholera:** Water-borne disease; transmitted through water contaminated with feces.
- Some viruses (such as rotavirus) can be transmitted through air.
- Nosocomial transmission is possible
- Shigellosis (blood dysentery) is mainly transmitted person-to-person.
- Shigellosis is a water-washed disease; transmitted more when there is scarcity of water.

# Symptoms Accompany Diarrhea

- Dehydration diarrhea can cause dehydration. Loss of electrolytes through dehydration affects the amount of water in the body, muscle activity, and other important functions.
- *Signs of Dehydration in Adults*
- Thirst
- Less frequent urination than usual
- Dark-colored urine
- Dry skin
- Fatigue
- Dizziness
- Light-headache

## Laboratory Diagnosis

- Stool microscopy
- Dark field microscopy of stool for cholera
- Stool cultures
- ELISA for rotavirus
- Immunoassays, bioassays or DNA probe tests to identify *E. coli* strains

- **WHO Treatment Plan A**
- **Plan A focuses on the three rules of home treatment:**
  - Give extra fluids
  - Continue feeding
  - Advise the caretaker when to return to the health facility.
- **WHO Treatment Plan B**
- Some dehydration.
- The approximate amount of ORS required is 75 mL/ kg; during first four hours, the mother slowly gives the recommended amount of ORS by spoonfuls or sips.
- After four hours, the child is reassessed and reclassified for dehydration, and feeding should begin.
- If dehydration persists, the same amount of ORS may be repeated for another 4 hours.

- **WHO Treatment Plan B**
- Severe dehydration require immediate IV infusion, nasogastric or oral fluid replacement according to WHO treatment guidelines.
- Give 100 mL/kg IV fluids.

# Treatment of Diarrhea

	<b>Fluid deficit</b>	<b>Clinical signs</b>	<b>Treatment</b>
Severe dehydration	Greater than 10% of their body weight	<ul style="list-style-type: none"><li>• Lethargic or Unconscious</li><li>• Sunken Eyes</li><li>• Skin pinch goes back very slowly (longer than 2 seconds)</li></ul>	WHO Treatment Plan C
Some dehydration	5 to 10% of their body weight	<b>Two of the Following Signs:</b> <ul style="list-style-type: none"><li>• Restless, Irritable</li><li>• Sunken Eyes</li><li>• Skin pinch goes back slowly (Skin stays up even for a brief instant)</li></ul>	WHO treatment Plan B
No dehydration	Less than 5% of their body weight	<ul style="list-style-type: none"><li>• No sign to classify as some or severe dehydration</li><li>• Skin pinch goes back Immediately</li></ul>	WHO treatment Plan A

## Nursing Management:

- Elicit a complete health history to identify character and pattern of diarrhea, and the following: any related signs and symptoms, current medication therapy, daily dietary patterns and intake, past related medical and surgical history, and recent exposure to an acute illness or travel to another geographic area.
- Perform a complete physical assessment, paying special attention to auscultation (characteristic bowel sounds), palpation for abdominal tenderness, inspection of stool (obtain a sample for testing).
- Inspect mucous membranes and skin to determine hydration status, and assess perianal area.
- Encourage bed rest, liquids, and foods low in bulk until acute period subsides

THANK YOU