

## **OLANREWAJU KABIRAT OMOWUMI**

Discuss on immunization and prevention

### **Immunization and Prevention**

#### **1. Immunization (Definition)**

Immunization is the process of protecting individuals against infectious diseases by giving vaccines that stimulate the body's immune system to produce immunity.

It helps the body recognize and fight disease-causing organisms.

It can be active (vaccines) or passive (antibodies given directly).

It prevents illness, disability, and death.

#### **2. Types of Immunization**

##### **a. Active Immunization**

The body produces its own antibodies after exposure to a vaccine or disease.

Long-lasting protection

Examples: Measles vaccine, Polio vaccine, Hepatitis B vaccine.

##### **b. Passive Immunization**

Ready-made antibodies are given.

Provides immediate but short-term protection

Examples: Tetanus antitoxin, Rabies immunoglobulin.

#### **3. Importance of Immunization**

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## 3. Importance of Immunization

Prevents the spread of infectious diseases

Protects individuals and the community (herd immunity)

The 3 Levels of Prevention

### A. Primary Prevention

Aims to stop diseases before they occur.

Immunization

Good hygiene

### B. Secondary Prevention

Aims to detect diseases early and begin treatment to stop progression.

Examples

Screening (BP check, HIV test, Pap smear)

Early diagnosis and prompt treatment

Growth monitoring in children

### C. Tertiary Prevention

Aims to reduce disability and improve quality of life after disease has occurred. Long-term treatment for chronic diseases (diabetes, hypertension)

#### **4. Prevention of Diseases**

Disease prevention involves actions taken to avoid disease or reduce its impact.

##### **The 3 Levels of Prevention**

###### **A. Primary Prevention**

Aims to stop diseases before they occur.

###### **Examples**

Immunization

Good hygiene

Safe water and sanitation

Health education

Use of insecticide-treated nets

Healthy lifestyle (diet, exercise)

###### **B. Secondary Prevention**

Aims to detect diseases early and begin treatment to stop progression.

###### **Examples**

Early diagnosis and prompt treatment

Growth monitoring in children

###### **C. Tertiary Prevention**

Aims to reduce disability and improve quality of life after disease has occurred.

###### **Examples**

Rehabilitation (physiotherapy)

Long-term treatment for chronic diseases (diabetes, hypertension)

Support groups

Surgery to correct complication

Immunization is a form of primary prevention

## **Prevention of Immunization**

Immunization is one of the most effective ways to prevent infectious diseases.

### **1. Prevents infection**

Vaccines help the body produce antibodies, which protect you from diseases like:

Measles

Polio

Tetanus

Hepatitis B

Tuberculosis (TB)

Yellow fever

### **2. Prevents disease severity**

Even if a vaccinated person gets infected, the illness is usually milder and less dangerous.

### **3. Prevents complications and death**

Vaccination reduces:

Severe disability

Long-term complications

Hospitalization

Death from vaccine-preventable diseases

### **4. Prevents spread to others**

Immunization protects:

Babies too young to be vaccinated

People with weak immune systems

### **5. Prevents outbreaks and epidemics**

When many people are immunized, diseases struggle to spread—reducing chances of outbreaks.

### **6. Prevents long-term health problems**

Some diseases have lifelong complications (e.g., paralysis from polio). Vaccination stops these.