

University college Hospital,Ibadan Community Health Officer Training

What is Prevention?

Prevention refers to all the actions, strategies, and measures taken to stop diseases, injuries, or health problems before they occur, become worse, or cause complications. It is the foundation of public health, because it focuses on protecting people rather than only treating illnesses.

Types of Prevention

1. Primary Prevention – “Stop the disease before it starts.”

These are steps taken before any sign of disease appears. They aim to reduce the chances of becoming sick.

Examples:

Vaccination

Good hygiene (handwashing, sanitation)

Healthy diet and exercise

Use of insecticide-treated mosquito nets

Health education

Safe water supply

Goal: Prevent the occurrence of disease.

2. Secondary Prevention – “Catch it early and treat quickly.”

These actions occur when a disease is already present but still in the early stage. They help detect illnesses early so treatment can stop progression.

Examples:

Screening: BP check, HIV test, breast exam, Pap smear

Early diagnosis and prompt treatment

Regular medical check-ups

Goal: Prevent the worsening of disease.

3. Tertiary Prevention – “Reduce complications and disability.”

These measures are taken after a disease has already caused damage. They help improve quality of life and prevent further disability.

Examples:

Rehabilitation after stroke

Physiotherapy

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

Support groups and counseling

Goal: Prevent disability, complications, and death.

Simple Summary

Primary → Prevent disease

Secondary → Detect disease early

Tertiary → Manage disease to avoid complications

IMMUNIZATION:

Types of Immunization

Immunization is classified into two major types, depending on how immunity is acquired:

1. Active Immunization

Active immunization occurs when the body's own immune system is stimulated to produce antibodies and memory cells after exposure to an antigen.

How it is achieved

Vaccination: e.g., measles vaccine, polio vaccine, BCG, tetanus toxoid.

Natural infection: when someone recovers from a disease and becomes immune.

Key Features

Protection develops slowly (days to weeks).

Provides long-lasting or even lifelong immunity.

Produces memory cells, which respond quickly during future exposure.

Very effective in preventing outbreaks.

Examples

Measles, mumps, and rubella vaccines

Hepatitis B vaccine

COVID-19 vaccines

Chickenpox immunity after natural infection

2. Passive Immunization

Passive immunization occurs when a person receives pre-formed antibodies rather than producing them.

How it is achieved

Naturally: from mother to baby

Through the placenta (IgG)

Through breast milk (IgA)

Artificially: through antibody-containing preparations

Anti-rabies immunoglobulin

Tetanus immunoglobulin

Snake antivenom

Hepatitis B immunoglobulin

Key Features

Provides immediate protection.

Immunity is short-lived (weeks to months).

No memory cells are formed.

Useful in emergencies and high-risk exposures.

Examples

Newborn protection from maternal antibodies

Immediate treatment after snakebite (antivenom)

Rabies exposure management