

### **Natural History of Health-related Conditions and Prevention of Diseases**

#### **Learning Objectives for the Lecture:**

At the end of the lecture the student is going to be able to:

1. Describe the natural history of health conditions.
2. Describe the stages of the natural history of health conditions.
3. Describe the process of prevention.
4. Describe the levels of prevention.

#### **Natural History of Health-related Conditions:**

**The natural history of health condition** is a description of the events that precedes the development of the health condition, and during its occurrence through the course of development, as well as its outcome.

#### **OR**

It refers to a description of the uninterrupted progression of a health problem in an individual from the moment of exposure to causal agents until recovery or death.

The natural history of a disease is sometimes said to start at the moment of exposure to causal agents. Knowledge of the natural history of disease ranks alongside causal understanding in importance for disease prevention and control. Natural history of disease is one of the major elements of descriptive epidemiology.

**The natural history of health conditions is divided in to three stages:**

1. **Pre-pathogenesis stage:** Period of time in which the agent, host and environment may interact with each other.
2. **Pathogenesis stage:** Period of time in which the agent interferes with the host in the environment and the existence of the health problem and occurrence of clinical manifestations.
3. **Post-pathogenesis:** The period in which the host tries to culminate his condition in return to health, or continues of chronic condition and or death.

# Prevention of Diseases

## **Prevention:**

It is the process through which preventive measures and strategies of control can be implemented for the sake of health promotion and diseases prevention.

## **Levels of prevention are:**

1. **Primary Prevention:** actions or measures designed to promote general health or specific protection against health Problems, this include health promotion and diseases protection.

**Health promotion measures** (Health education, environmental modifications, Nutritional interventions and lifestyle and Behavioral changes)

Specific protection measures (Immunization to protect against specific disease, fortification of foods with specific nutrients, and use of prophylactic drugs to protect against particular diseases).

2. **Secondary Prevention:** actions taken for early detection and identification (diagnosis) of health problems to provide the proper treatment (ex. Screening for cancer and treatment).

3. **Tertiary Prevention:** activities that aim at returning the clients to the highest level of functioning and preventing further deterioration and reoccurrences of more health problems, this include restoration and rehabilitation.

## **Disease Process and Outcome of Diseases**

**Disease** is any impairment of normal physiological function affecting all or part of an organ. A specific pathological change caused by infection, stress, etc., producing characteristic symptoms; illness or sickness in general

Commonly, the term disease is used to refer specifically to infectious diseases, which are clinically evident diseases that result from the presence of pathogenic microbial agents, including viruses, bacteria, fungi, protozoa, and multicellular Organisms.

**Illness and Sickness** are generally used as synonyms for disease. However, this term is occasionally used to refer specifically to the patient's personal experience of his or her disease.

**Disorder in medicine.** a disorder is a functional abnormality or disturbance. Medical disorders can be categorized into mental disorders, physical disorders, genetic disorders. etc.

### **Medical condition**

A medical condition is a broad term that includes all diseases and disorders. While the term medical condition generally includes mental illnesses, in some contexts the term is used specifically to denote any illness, injury, or disease.

The term medical condition is also a synonym for [medical state](#), in which case it describes an individual patient's current state from a medical standpoint. This usage appears in statements that describe a patient as being in critical condition, for example.

