# **PATHOPHYSIOLOGY**

# Dr. Wasfi Dhahir Abid Ali

Department of medical sciences –College of Nursing – University of Basrah

# INTRODUCTION TO PATHOPHYSIOLOGY

### PATHOLOGY & PATHOPHYSIOLOGY

**Homeostasis:** Maintain internal stability to any situation or stimulus that would tend to disturb its normal condition or function

Pathology The science of the causes and effects of diseases.

Pathophysiology: The physiology of abnormal states; specifically: the functional changes that accompany a particular syndrome or disease (mechanisim of diseases)

# Etiology; Pathogens and relative key

**Etiology**: Branch of knowledge concerned with causes; the cause of a disease or <u>abnormal</u> condition.

Pathogens: a bacterium, virus, or other microorganism that can cause disease.

## Relative key:

- \*Multifactorial = many factors
- \*Iatrogenic = caused by treatment
- Idiopathic = un known cause

# The pathogenesis of a disease

The pathogenesis of a disease is the biological mechanism (or mechanisms) that lead to the diseased state. The term can also describe the origin and development of the disease, and whether it is acute, chronic, or recurrent **Types of pathogenesis** include microbial infection, inflammation, malignancy and **tissue breakdown**.

For example, bacterial pathogenesis is the mechanism by which bacteria cause infectious illness.

### **SIGNS AND SYMPTOMS**

Signs: a phenomenon that can be detected (Objective and musured) e. g fever. B p

**Symptoms:** A symptom is a phenomenon that is experienced by the individual affected by the disease For examples, **anxiety,pain**, and **fatigue** are all symptoms.(**unobjective**, **feeling**)

### **CLINICAL MANIFESTATION TERMS**

Local: Affecting only a particular part or area of the body,

Systemic: Affecting the body generally

Acute: Characterized by sharpness or severity acute pain

having a sudden onset, sharp rise, and short course

Chronic: occurring for a long time

**Insidious**: gradual onset

**Exacerbation:** increasing symptoms

Subacute: between cute and chronic

Remission: symptoms free period

Asymptomatic: no noticeable symptoms

# **Diagnosis & Treatment**

**Diagnosis:** the identification of the nature of an illness or other problem by examination of the symptoms.

**prognosis**: a forecast of the likely outcome of a situation

**morbidity**: is the frequency with which a disease appears in a population

**mortality**: The number of deaths in a given area or period, or from a particular cause.

**Treatment:** medical care given to a patient for an illness or injury

#### POPULATION HEALTH

Epidemiology: study of diseases within population.

**incidence**: rate of occurrence

prevalence: disease percentage of population

**Endemic**: disease in small area

**Epidemic**; widespread

**Pandemic**: world-wide