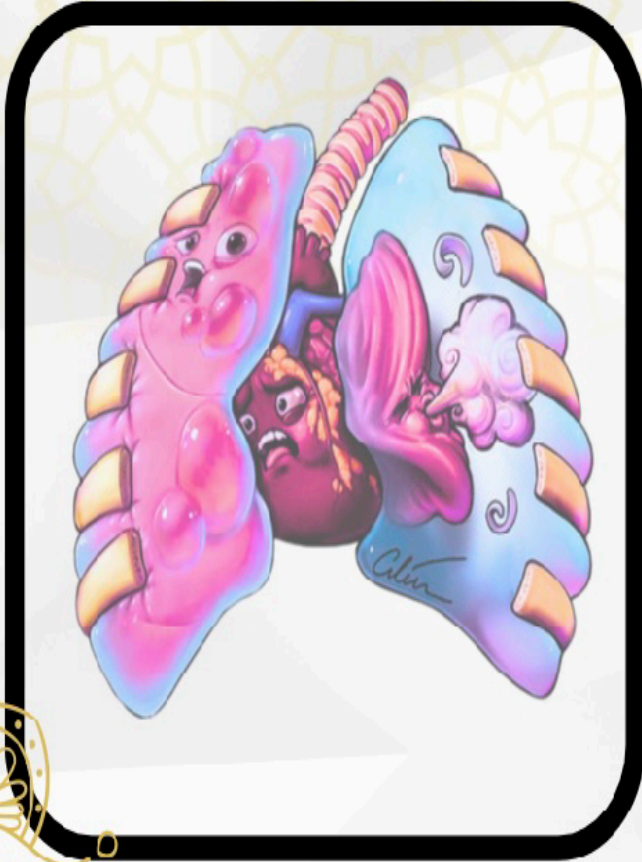


# تفريغ علم وظائف الأعضاء المرضي



اسم الموضوع: **Concept**

إعداد الصيدلاني/ة: **Malak**



لجان الدفوعات



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

**Pathophysiology-Concepts (terminology)**  
**Faculty of Pharmaceutical Sciences**  
**Dr. Amjaad Zuhier Alrosan**

دک اشروح لیه سدھی ویس لیه آمری ولاحل عقده من لسانی بیفقه قوی

## General Overview

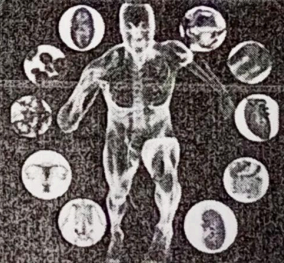
Branches of science are:

- 1- Anatomy (structures of body parts)
- 2- Physiology (functions of these parts)

Anatomy



Physiology



# Difference from Pathology

تغيير يصير في العضو

- Pathology emphasizes the structural changes
- Pathophysiology focuses on the functional and metabolic alterations and the mechanisms



التغيير يلي يصير في آلية التفاعل/الوظيفة

## Vocabulary

**anatomy** - The study of the form and structure of an organism.

**gross anatomy** - The study of the organs, parts, and structures of a body that are visible to the naked eye.

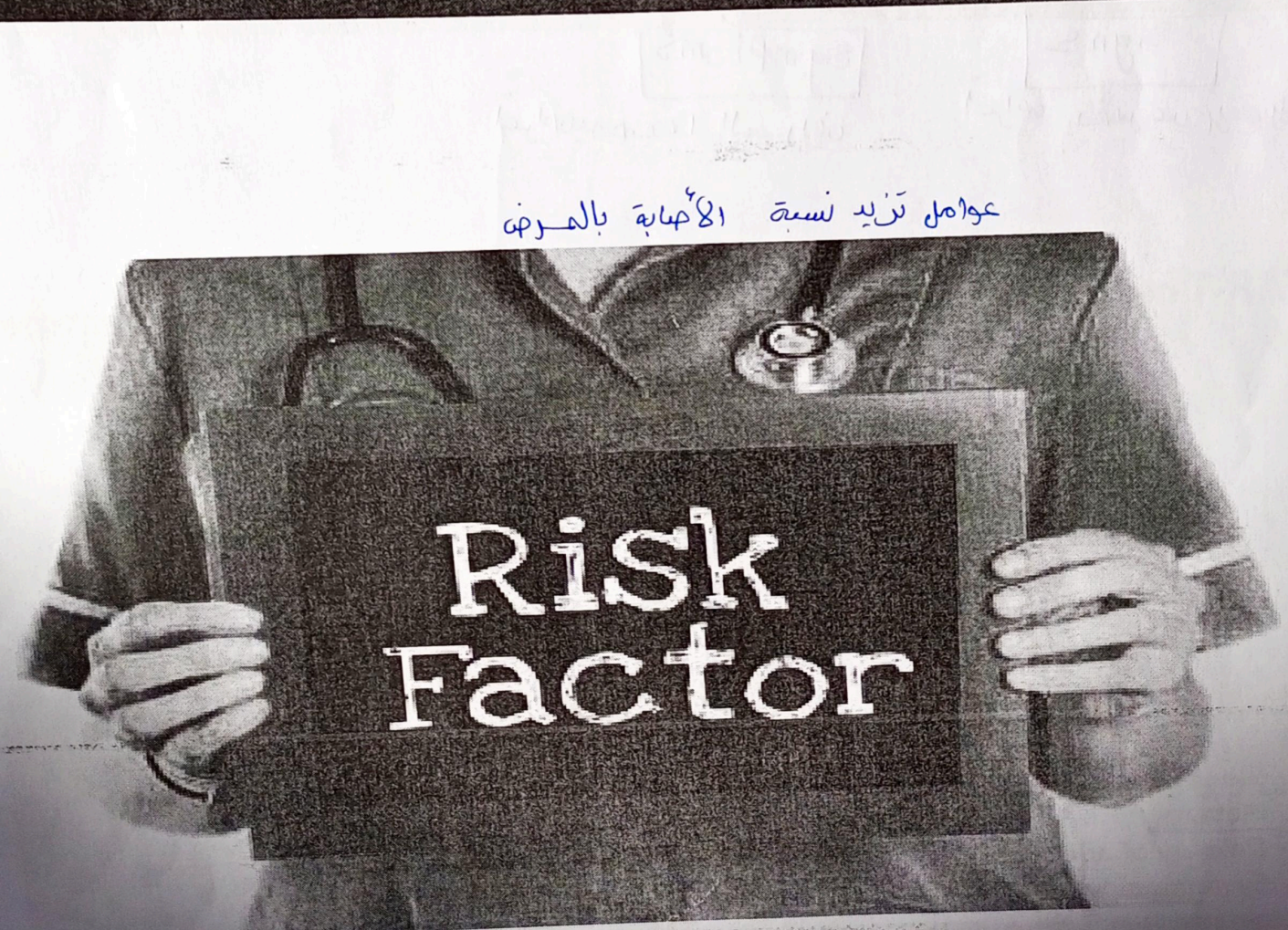
لتشريح

**physiology** - The study of the processes of living organisms, or how and why they work.

**pathophysiology** - The study of how disease occurs and response of the body to disease process.



علم مسيأته الأمرض



عوامل تزيد نسبة الأصابة بالمرض

Risk  
Factor

# Signs and Symptoms

Signs

أعراض تظهر عن طريق الفحص

Symptoms

أعراض يوصفها المريض

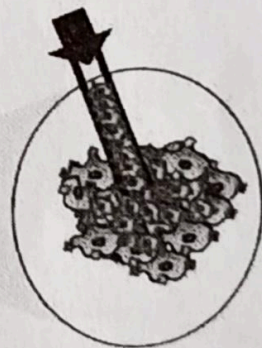
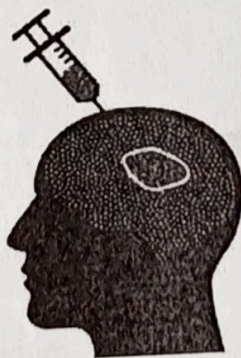
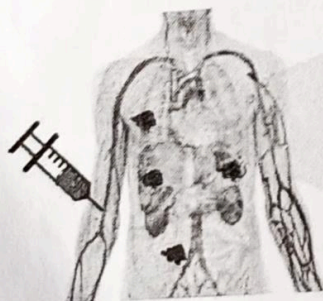
علاج مناعي

## CAR-T cells for cancer immunotherapy: local vs. systemic treatment

Systemic delivery

Cancer cell  
CAR-T cell

Local delivery



أوضح الدو

- Blood cancer
- Metastatic disease
- Delivery of adequate CAR-T load?
- Systemic side effects?

تأثير جانبي

ورم

- Localized tumor
- Delivery of high CAR-T load
- Fewer systemic side effects

أقل

Local

Systemic

Local: Manifestations found at the site of disease, e.g. local swelling or redness, pain.

احمرار

آلام

تورم

موقع

موضع

Systemic: Manifestations present throughout the body, e.g. fever, lethargy, and high BP.

مظهر

حمى

كسل / نفاس

**ACUTE**



**CHRONIC**



أعراض قوية



(مزمنة)

**ACUTE**

**CHRONIC**

**ACUTE** pain is the one that is severe, intense, but also usually is short in duration.

شديد

قصير

مدة

قصير

قليل

أعراض تظهر فجأة وتبلى لقل (الآلم لمدة قليلة)

**CHRONIC** pain is continual and recurring.

متواصل آلم

دوري

متناوب

آلم متواصل لمدة طويلة و تدرج في ظهور الأعراض

# exacerbation

زيادة أعراضها له

أعراض متوسطة و تبليش تزيد

# subacute



# REMISSION

تخفيف

لا يوجد إليه أعراض

# asymptomatic

(ذخيرة العلاج)

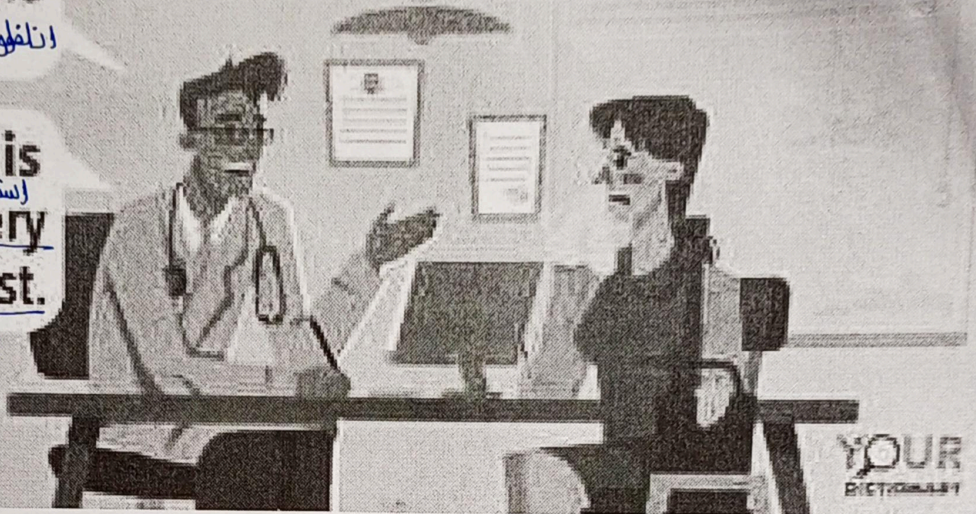
# Prognosis VS Diagnosis

Your diagnosis is the flu. الإنفلونزا

تشخيص المرض

Your prognosis is a full recovery after lots of rest. الشفاء / الشفاء

استراحة



YOUR DICTIONARY

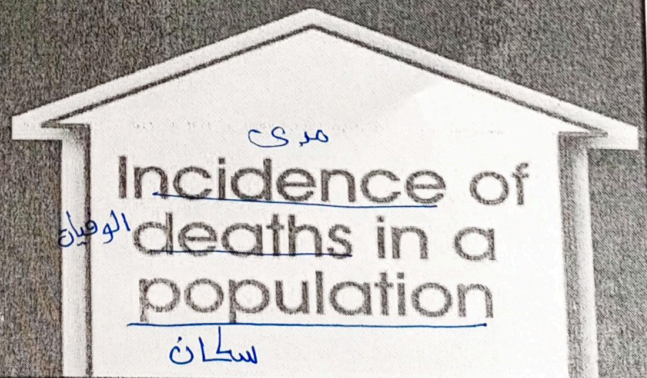
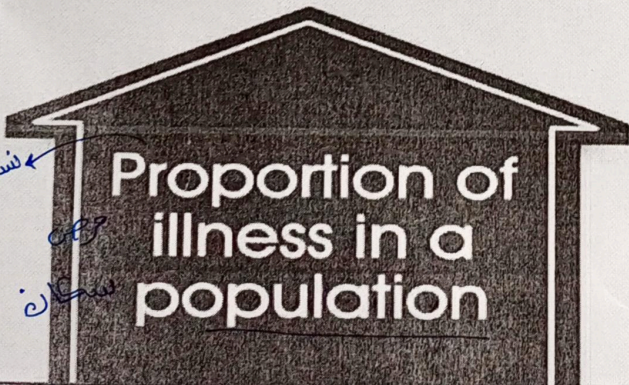
انتشار المرض في منطقة معينة

الوفيات من مرض معين

## Morbidity

## Mortality

Buzzle.com



علم الأوبئة

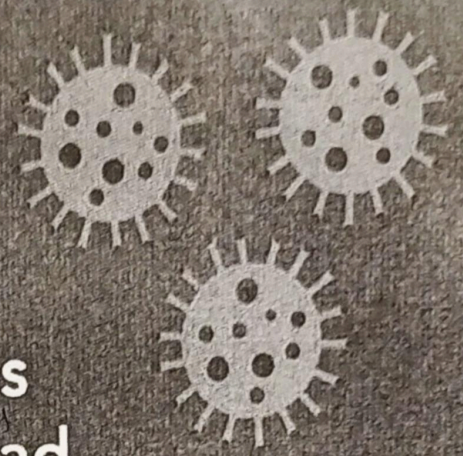
علم

# Epidemiology

noun

علم

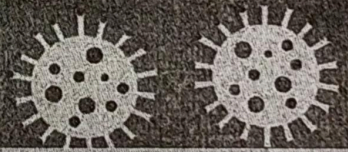
the scientific study of diseases and how they are found, spread, and controlled in groups of people.



Cambridge Dictionary

علم الأوبئة ودراسة نشوء الأمراض وكيف تنتشر وكيف يمكن للسيطرة عليه

## Epidemiology



<b>Prevalence</b> الحالات المسجلة تفسير	موجود/حالي Measures <b>existing</b> cases of disease and is expressed as a proportion
<b>Incidence</b> الحالات الجديدة تفسير	جديدة Measures <b>new</b> cases of disease and is expressed in person-time units

# Endemic



Endemic (adj) means native to a particular area or region or an exclusive characteristic of a thing, place, or concept

NO KNOWN MALARIA TRANSMISSION

MALARIAL TRANSMISSION IN SOME PLACES

MALARIAL TRANSMISSION OCCURS THROUGHOUT

FOR EXAMPLE, MALARIA IS A DISEASE THAT IS ENDEMIC TO CERTAIN COUNTRIES, SUCH AS SUB-SAHARAN AFRICAN COUNTRIES, CENTRAL AND SOUTH AMERICA, AND SOME ASIAN COUNTRIES.



انتشار المرض في منطقة معينة

## EPIDEMIC VS PANDEMIC

لانتشار مرضنا في كل العالم

A disease that spreads quickly in a specific region.

سريعاً معينة

A disease that spreads quickly across a large geographical area, like a continent or the world.

العالم

منطقة جغرافية كبيرة

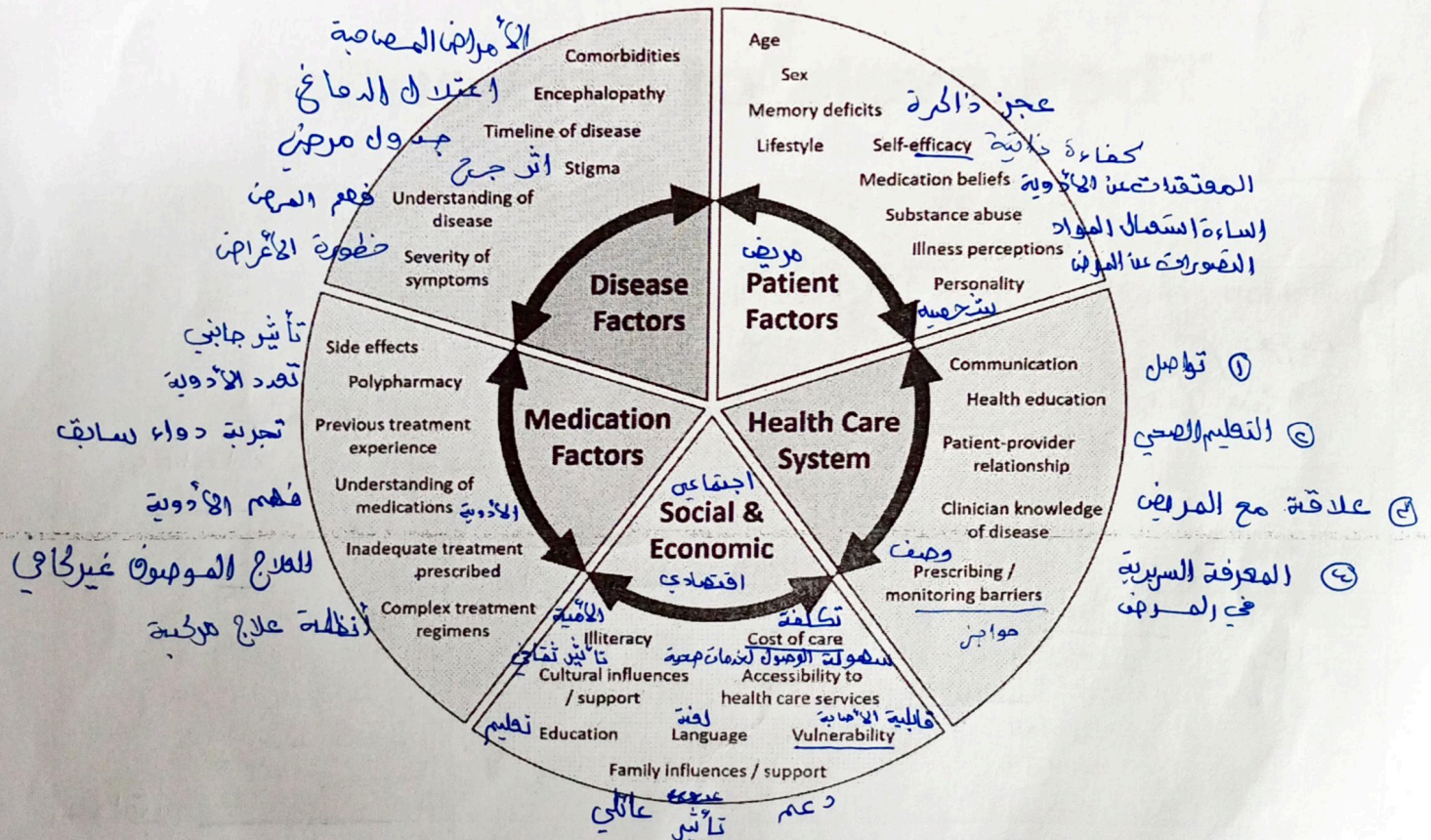
القارة

Endemic \* انتشار الوباء في منطقة محددة

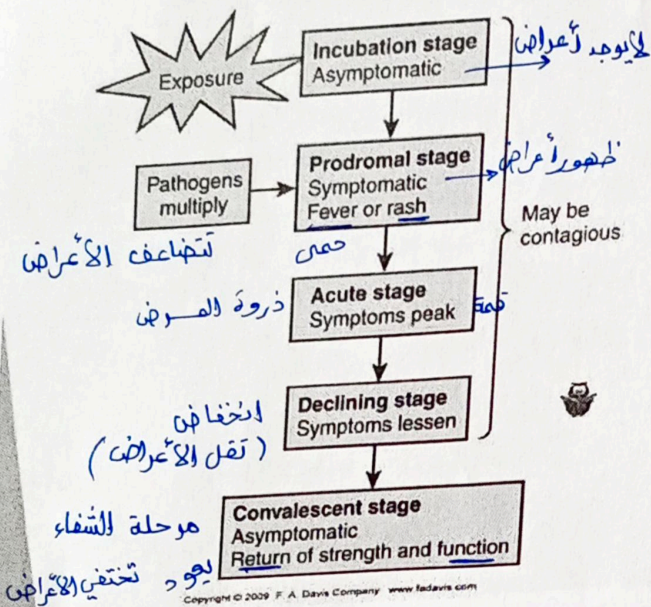
Endemic (adj) means <sup>محلّي</sup> native to a <sup>محلّي</sup> Particular area or region or an exclusive characteristic of a thing Place, or concept.

# pathogenesis

جارية تطور المرض



# Stages of Disease



- ▶ Incubation stage
- ▶ Prodromal stage
- ▶ Acute stage
- ▶ Declining stage
- ▶ Convalescent stage

# The Levels of Prevention

	PRIMARY Prevention	SECONDARY Prevention	TERTIARY Prevention
Definition <i>تعريف</i>	An intervention implemented before there is evidence of a disease or injury. <i>اعتراض</i>	An intervention implemented after a disease has begun, but before it is symptomatic. <i>موجة</i>	An intervention implemented after a disease or injury is established. <i>مضاعفات</i>
Intent <i>هدف</i>	Reduce or eliminate causative risk factors (risk reduction). <i>تقليل</i>	Early identification (through screening) and treatment. <i>كشف</i>	Prevent sequelae (stop bad things from getting worse). <i>وقاية</i>
Example <i>مثال</i>	Encourage exercise and healthy eating to prevent individuals from becoming overweight. <i>تشجيع</i>	Check body mass index (BMI) at every well checkup to identify individuals who are overweight or obese. <i>مؤشر كتلة الجسم</i>	Help obese individuals lose weight to prevent progression to more severe consequences. <i>خبر</i>

خطه علاج