

# Health, Disease, and the Epidemiological Triad

Dr. Rania Abd ElMohsen Abo El Nour

# Presentation Objectives

- • Define the modern concept of Health.
- • Distinguish between different Causes of Disease.
- • Explore the Epidemiological Triad.
- • Discuss its importance in public health intervention.

# Defining Health – The WHO Perspective

- WHO (1948): A state of complete physical, mental, and social well-being.
- Health is holistic involving mind, body, and society.

# Biomedical vs. Social Model of Health

- Biomedical: Focus on biological repair.
- Social Model: Impact of social, economic & environmental factors.

# What is Disease?

- A pathological condition due to infection, genetics, or environment.
- Identified by signs (objective) and symptoms (subjective).

# Causes of Disease

## 1) **Biological & Genetic**

- • Pathogens: Bacteria, viruses, fungi.
- • Genetics: Inherited conditions.
- • Aging: Cellular degeneration.

# Causes of Disease

## 2) Social & Environmental

- • Environmental toxins & pollution.
- • Poverty, education, housing conditions.

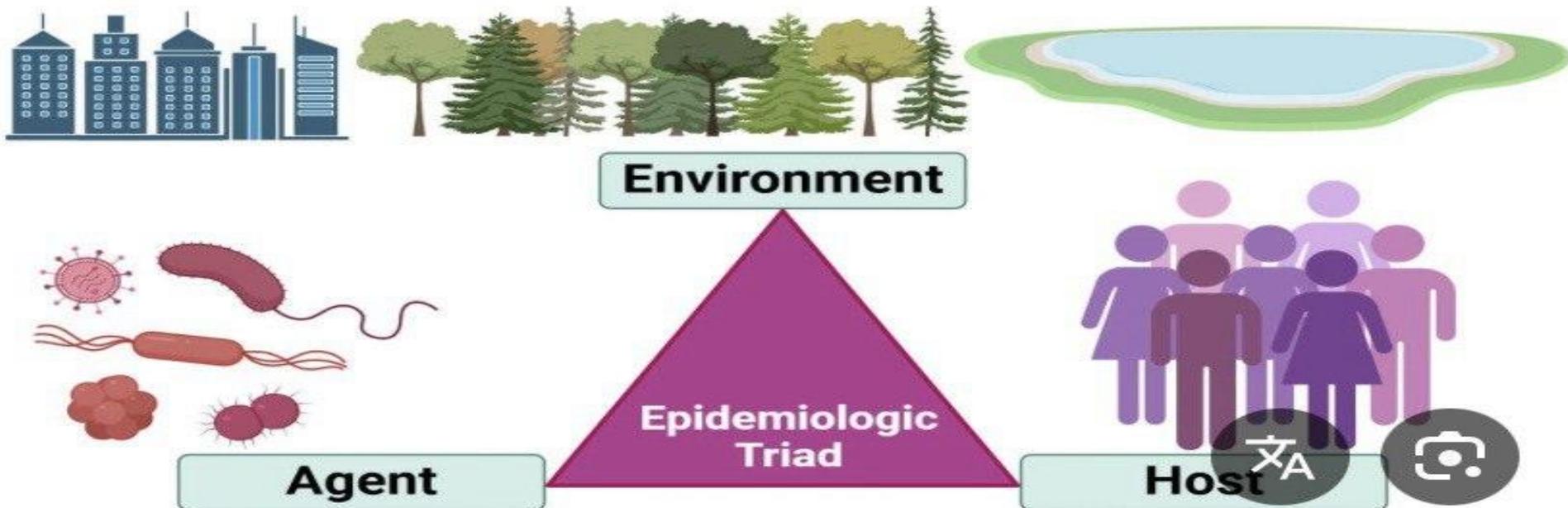
# Causes of Disease

## 3) Behavioral & Lifestyle

- • Tobacco use
- • Physical inactivity
- • Poor nutrition

# Epidemiological Triad

- Agent (What)
- Host (Who)
- Environment (Where)



# Component 1 – Agent

- Biological, Chemical, Physical, Nutritional agents.

# Component 2 – Host

- Age, genetics, immunity, nutritional status.

# Component 3 – Environment

- Climate, geography, sanitation, healthcare access.

# Concept of Balance

- Disease occurs when balance between Agent, Host & Environment is disrupted.

# Importance of the Epidemiological Triad

- Break agent
- protect host
- modify environment.

# Conclusion & Summary

- Health is holistic.
- Disease is multifactorial.
- Triad is vital for disease control.



**THANK  
YOU**