Introduction to Public Health 1
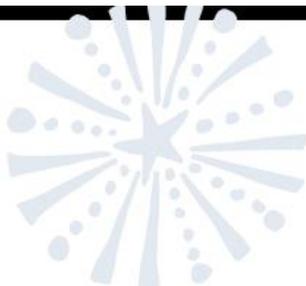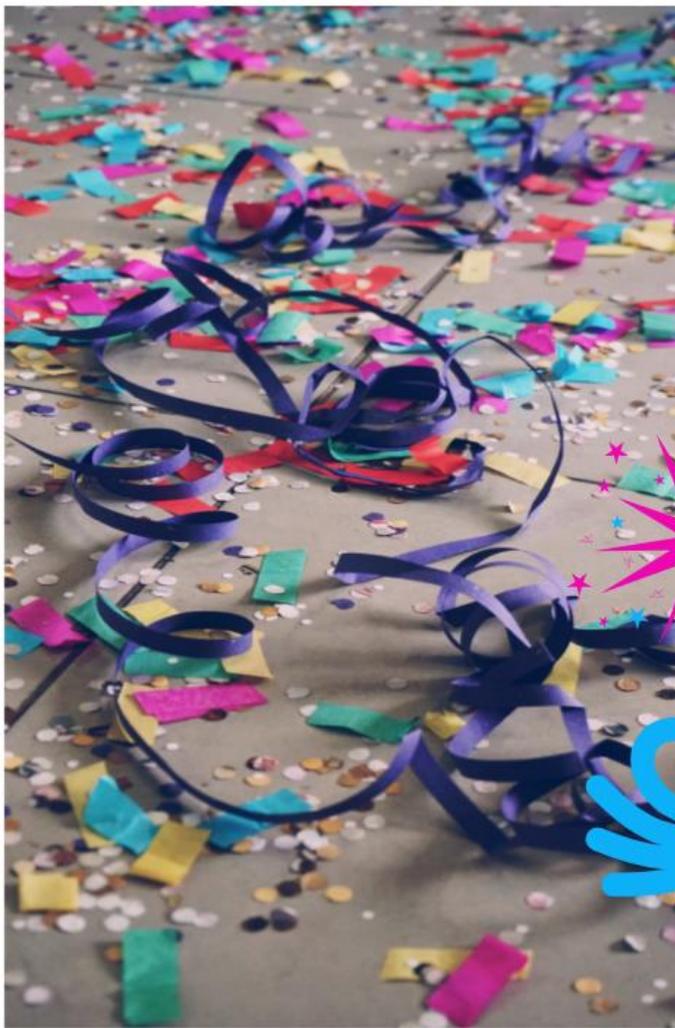
Basic Concepts & Foundations
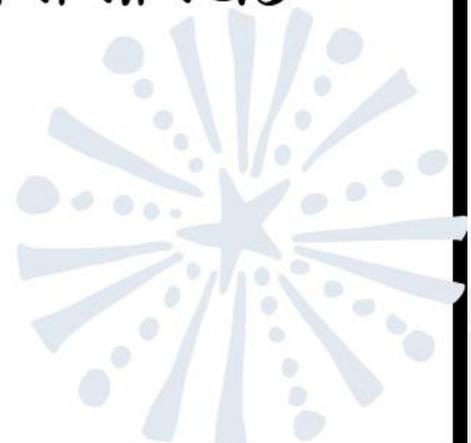
Dr. Israa Al-Rawashdeh, MBBS, MPH, PhD

Faculty of Medicine, Mutah University,
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Course title: Public health
Course code: 1506202
Credit hours: 2 hours

Tips to kick-off the new academic year successfully

- **Reflect on previous year's mistakes and draw personal conclusions**

- **Plan time and set your goals**

- **Organize your study environment**

- **Ask for help**

- **Try new things**

- **Develop anti-stress strategies**

- **Attending classes is always better than copying notes from your peers, audio tracks..etc..**

Preparing for next semester like

I AM READY TO GET HURT AGAIN.

Objectives of this lecture:

1. Define public health and explain its importance in daily life.
2. Describe the WHO definition and dimensions of health.
3. Explain the concept of the health spectrum as a dynamic continuum.
4. Identify the main determinants of health according to the Dahlgren & Whitehead model.
5. Differentiate between a population and a community in public health practice.

Why Public Health Matters?

Can you name one example of public health in your daily life?

Public health has saved more lives than any medical treatment in history!

- Possible answers:

- 💉 **Vaccination** (like COVID-19, polio, measles)

- 🥛 **Clean drinking water** supply

- 🚗 **Wearing seatbelts** when driving

- 🚭 **Smoke-free public places** (no smoking in restaurants & universities)

- 🗑️ **Waste collection & hygiene**

What is Health? (WHO definition & dimensions)

Feeling healthy is core to our everyday lives

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."
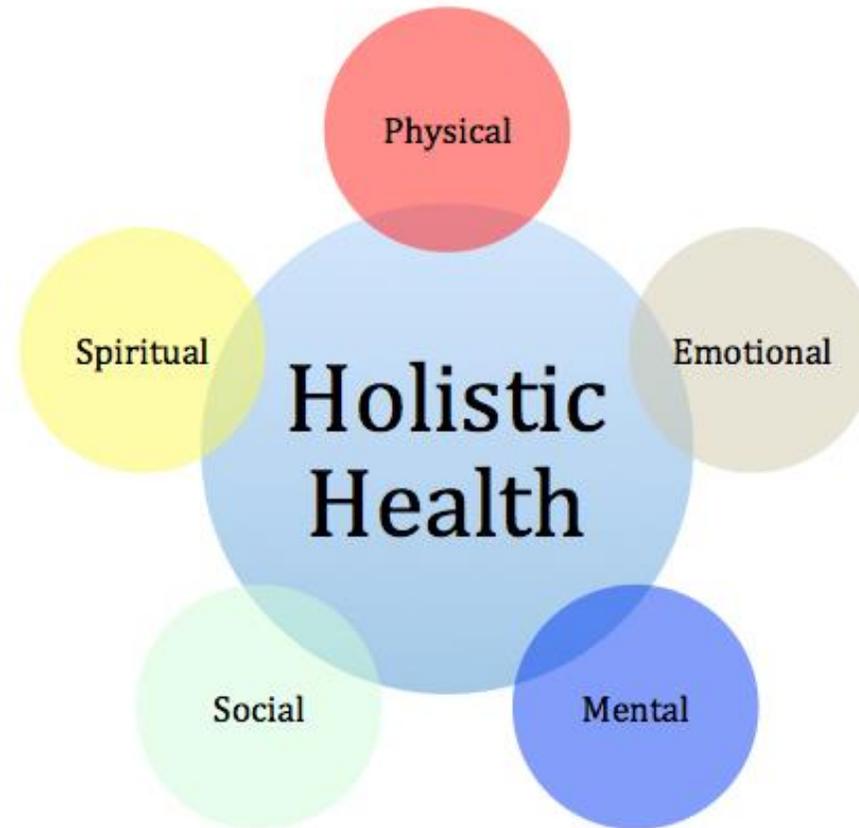
–World Health Organization, 1948

- Recently this statement has been expanded to include the ability to lead a "socially and economically productive life".

Dimensions of Health

- Health **is multidimensional**

Dimensions of Health

- The WHO definition mentions three specific dimensions (physical, mental, and social), some other dimensions like spiritual, emotional may also be included.

- **Physical health-** The anatomical and physiological integrity of the body; the ability to perform daily tasks without limitation. (e.g., walking, climbing stairs, recovering quickly from an illness).

- Nutrition, and medical care are strongly linked to physical health

What is Physical Health?

Physical Activity   Diet   Sleep

04

- **Mental Health-** ability to think clearly, learn, concentrate, and make sound decisions.(*Example:* Solving exam problems logically; focusing during study; planning study time effectively.)

Your Mental Health is Wealth

Health **is multidimensional**

- **Social health-** ability to build and maintain relationships (e.g., family, friends, community) and acceptable interaction with other people.

- *Example:* celebrating with friends, supporting others in times of loss, teamwork at university

- **Emotional health -** is the ability to recognize and express emotions <u>appropriately in response to different stimuli.</u> It also refers to maintaining personal stability during stressful situations such as tension, depression, or anxiety. Emotional health is closely related to mental health but focuses more on feelings and emotional expression.

- *Example:* staying calm during exam stress, expressing joy or sadness in healthy ways.
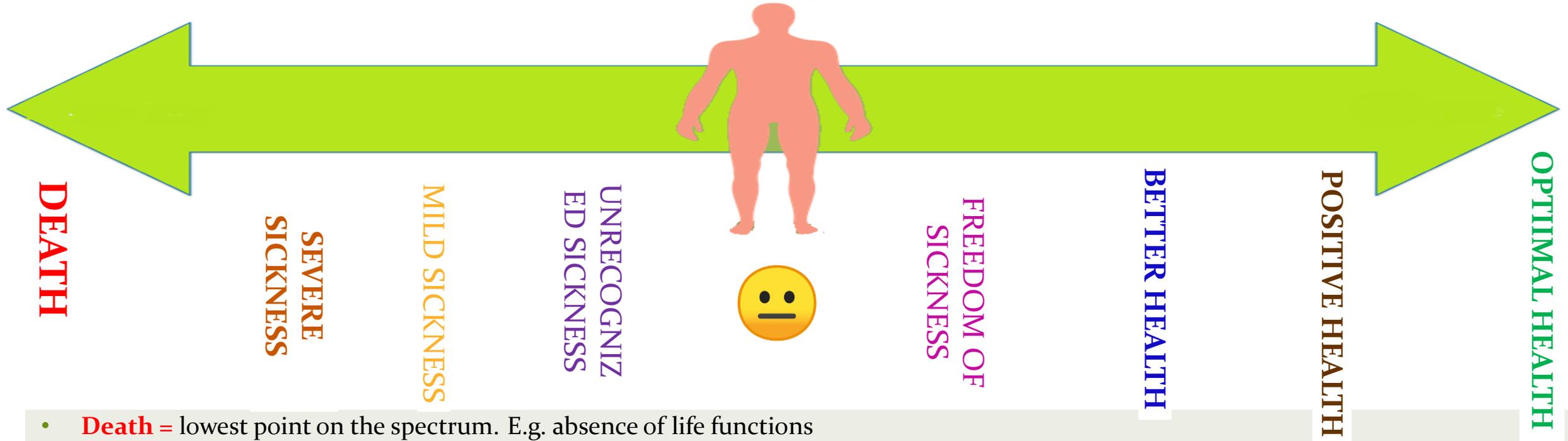
Health **is multidimensional**

- **Spiritual Health** - **Spiritual health** refers to the values, beliefs, and principles that give meaning and purpose to life.

- It does not necessarily relate only to religion; it can also reflect personal ethics and inner peace.

- Examples include: practicing prayer or meditation, reading a holy text, volunteering to help others, and finding purpose during difficult times.

- **Other dimensions** such as philosophical dimension, cultural dimension, socioeconomic dimension, environmental dimension, educational dimension, nutritional dimension, and so on.

Spectrum of Health (Concept)

DEATH — SEVERE SICKNESS — MILD SICKNESS — UNRECOGNIZED SICKNESS — FREEDOM OF SICKNESS — BETTER HEALTH — POSITIVE HEALTH — OPTIMAL HEALTH

- **Death** = lowest point on the spectrum. E.g. absence of life functions

- **Illness and disease** vary in severity. (severe: heart failure, advanced cancer, mild/moderate: common cold, mild hypertension).

- **Unrecognized sickness:** Disease is present but not yet diagnosed. Example: undetected diabetes or hypertension.

- **Freedom of sickness:** No diagnosed disease, but not necessarily full well-being. Example: a person with no symptoms but poor lifestyle habits (e.g., sedentary, unhealthy diet).

- **Better health** = improved state compared to illness, but not complete well-being

- **Positive health** = the WHO ideal of complete physical, mental, and social well-being

- **Optimal health** = functioning at the **highest level possible for the individual**, given their genetic capacity and circumstances for physical, mental, and social domains. (An athlete reaching peak performance. A chronic patient living fully and productively despite illness.
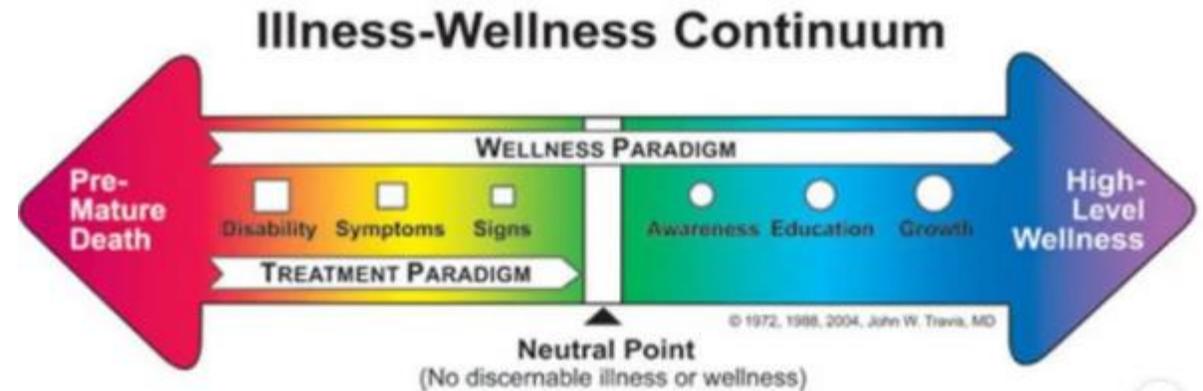
Spectrum of Health (Concept)

- Health is a **dynamic continuum**, not a fixed state.

- The spectrum ranges from **death** at the lowest point to **optimal health** at the highest.

- **There are degrees or "levels of health", as there are degrees or 'severity of illness'.**

- *"Not being sick does not mean you are healthy."*

- No single cut-off exists; individuals can move back and forth along the spectrum.

Spectrum of Health (Concept)

- **"Health is not something to be attained once and for all; it is a dynamic state that must always be promoted, preserved, and restored when impaired."**

- Medical care often focuses on illness and treatment.

- Public health focuses on shifting populations toward better and optimal health. Example: Vaccination → moves people from "risk of disease" to "positive health.

Illness-Wellness Continuum

Pre-Mature Death

WELLNESS PARADIGM

Disability Symptoms Signs

TREATMENT PARADIGM

Awareness Education Growth

High-Level Wellness

© 1972, 1988, 2004, John W. Travis, MD

Neutral Point
(No discernable illness or wellness)

We are always either developing disease or developing health.

DO YOU AGREE?

DETERMINANTS OF HEALTH

- The range of personal, social, economic, and environmental factors that influence individual and population health status.

- These determinants interact with each other, and together they shape health outcomes.

Main Categories of Determinants (WHO & Dahlgren & Whitehead Model, 1991)
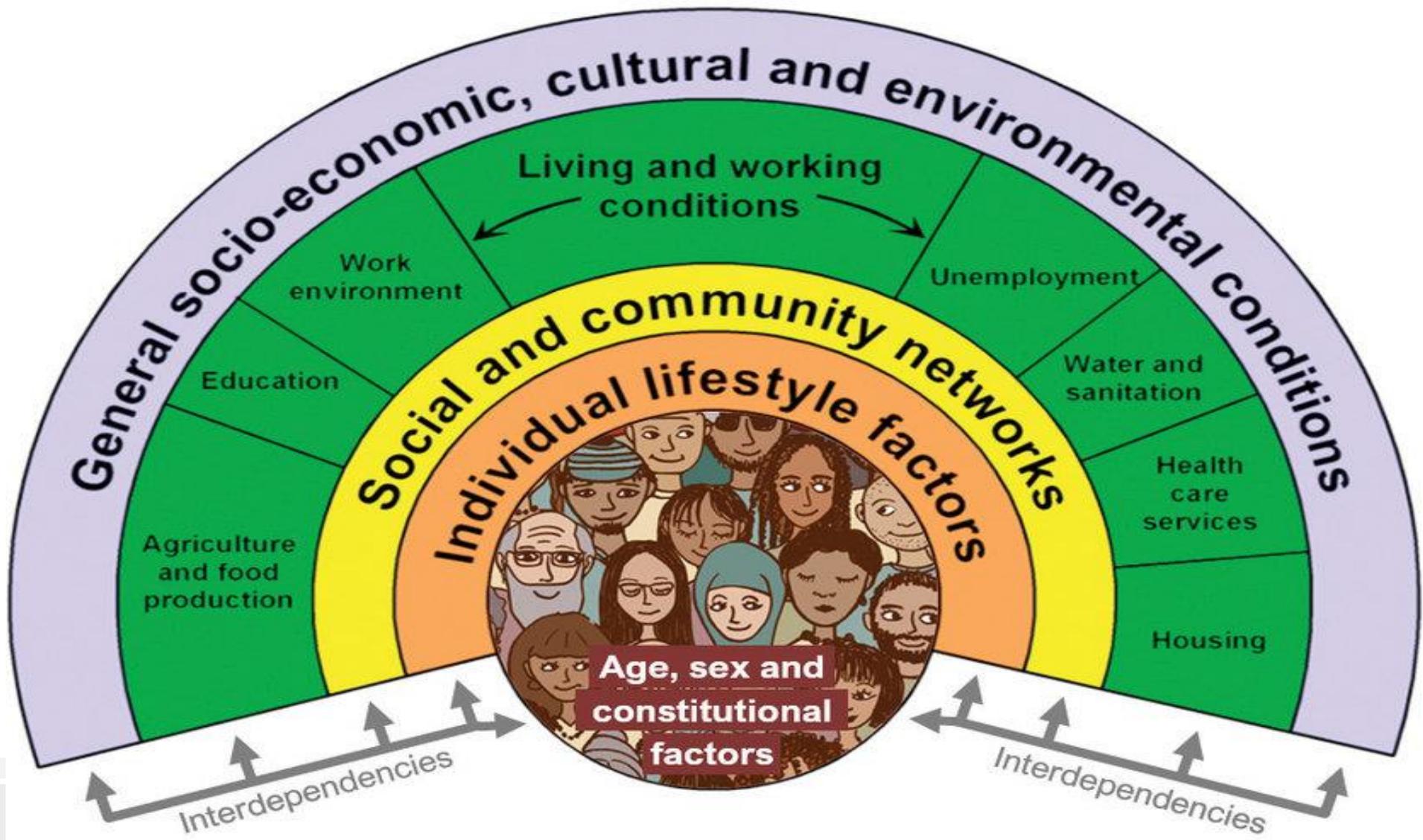
Main Categories of Determinants (WHO & Dahlgren & Whitehead Model, 1991)

- **1. Biological Factors:** These are non-modifiable determinants. Age, sex, genetics, inherited conditions. Example: genetic predisposition to certain diseases, Females have higher life expectancy.

- ✓ **2. Individual Lifestyle Factors (Behavioral):** These are modifiable determinants. Daily choices: diet, physical activity, smoking, alcohol, sleep, stress management. Example: smoking increases risk of lung cancer, Unsafe sport practice ,Eating contaminated food, etc.

- **3. Social and Community Networks:** Family, friends, peer influence, social capital, community participation. Example: people with strong social support live longer and have lower risk of depression.

Main Categories of Determinants (WHO & Dahlgren & Whitehead Model, 1991)

- **4. Living and Working Conditions** Housing, employment, working environment, education, health care access, sanitation. Example: Poor housing → asthma. Unsafe jobs → workplace injuries. Education → healthier behaviors.

- **5. General Socio-economic, Cultural, and Environmental Conditions:** Policies, social stability, economic systems, cultural customs in the community, environmental sustainability. Example: National immunization programs improve child survival, Climate change increases vector-borne diseases.

Health ≠ only health care.
Healthcare contributes ~10–20% to health outcomes.
Social, behavioral, environmental, and biological factors = 80–90%.
Focus of **public health** is to address the broader determinants, not only treat disease

Population and Community Concepts

- **What is a Population?**

- A population is a group of people sharing one or more common characteristics:

➢ Age (children, elderly, mothers)

➢ Geographic area (urban, rural, refugee camps)

➢ Health condition (diabetes patients, TB patients)

➢ Occupation/role (students, factory workers, health professionals)

➢ Socioeconomic or ethnic group

📌 Public health always focuses on populations, not just individuals.

Population and Community Concepts

- **What is a Community?**

- *A community is a population group that shares not only common characteristics, but also social relationships, identity, or a sense of belonging.*

- Examples:
  - Residents of Al-Karak
  - Online health-support groups

- 💡 *Community = population + social connection/interaction.*

Population and Community Concepts

- Public health interventions are usually **population-based**. Identifying community helps in ensuring engagement.

- 📌 Example:

- **Population approach:** National immunization program for all children under 5 years old.

- **Community approach:** Local health education campaign in one village.

- ☞ *Every community is a population with social ties and interaction, but not every population is a community.*

Can you think of a **population** you belong to? And a **community** you feel connected to?

Add a Slide Title - 5

Thank you

To be continued

Next time:　　　How public health works in practice → history, prevention levels, and systems