

CONCEPTS of HEALTH & DISEASE

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*"...public health promotes and
protects the health of people and
the communities where they live,
learn, work, and play."*

10/8/2023

Learning Objectives

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At the end of this course, you will be able to conceive comprehensively the Concepts of Health & Disease and to;

- ***Realise the exact definitions of both concepts in terms of health & disease***
- describe the *differences between ill and fine health*
- define ***key terms*** to be considered as healthy individuals & communities
- describe the role of health definition by WHO
- recognize the ***core public health functions to create both healthy individuals & community***
- list basic ***determinants of a healthy society including socio-economic-cultural ones..***
- recognize the responsibility of the State & community to create a healthy population

CONCEPT OF HEALTH

- Health is evolved over the centuries as a concept from individual concern to world wide social goal and encompasses the whole quality of life.

Changing concept of health till now are:

- Biomedical concept
- Ecological concept
- Psychosocial concept
- Holistic concept



Health

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❑ The extent to which an individual or a group is able to realise aspirations and satisfy needs, and to change or cope with the environment.

❑ **Health** is a resource for everyday life, not the objective of living; it is a positive concept, emphasising social and personal resources as well as physical capabilities.

❑ **Your health** is related to how much you feel your potential to be a meaningful part of the society in which you find yourself is adequately realised.

Health inequality

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- Differences observed between groups due to one group experiencing an advantage over the other group rather than to any innate differences between them.

Health inequity

- ✓ The presence of unfair and avoidable or remedial differences in health among populations or groups defined socially.

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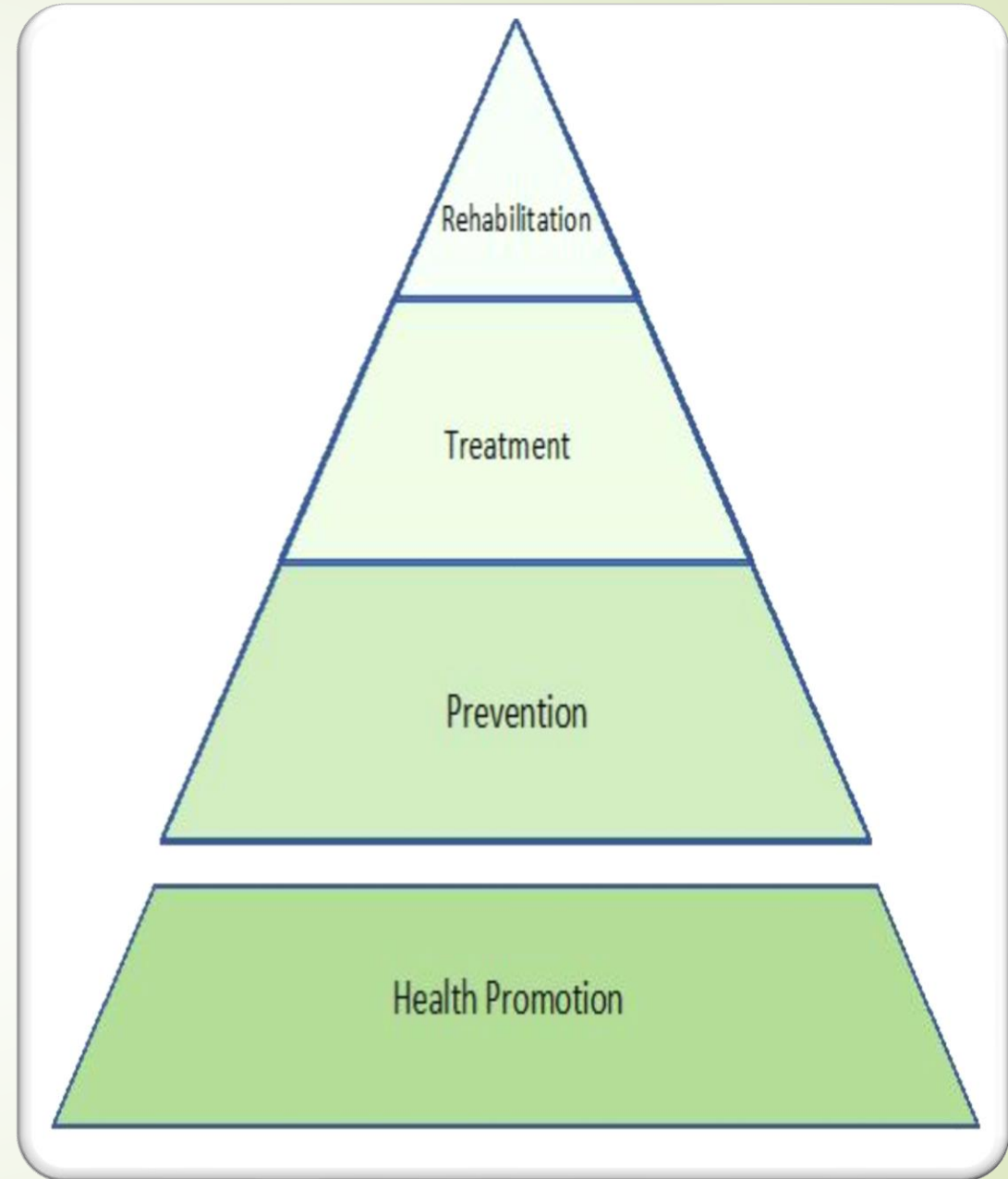
Health promotion

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- ❖ *The process of enabling people to exert control over and to improve their health.*
- ❖ As well as covering actions aimed at strengthening people's skills and capabilities; it also includes actions directed towards changing social and environmental conditions, to prevent or to improve their impact on individual and public health.

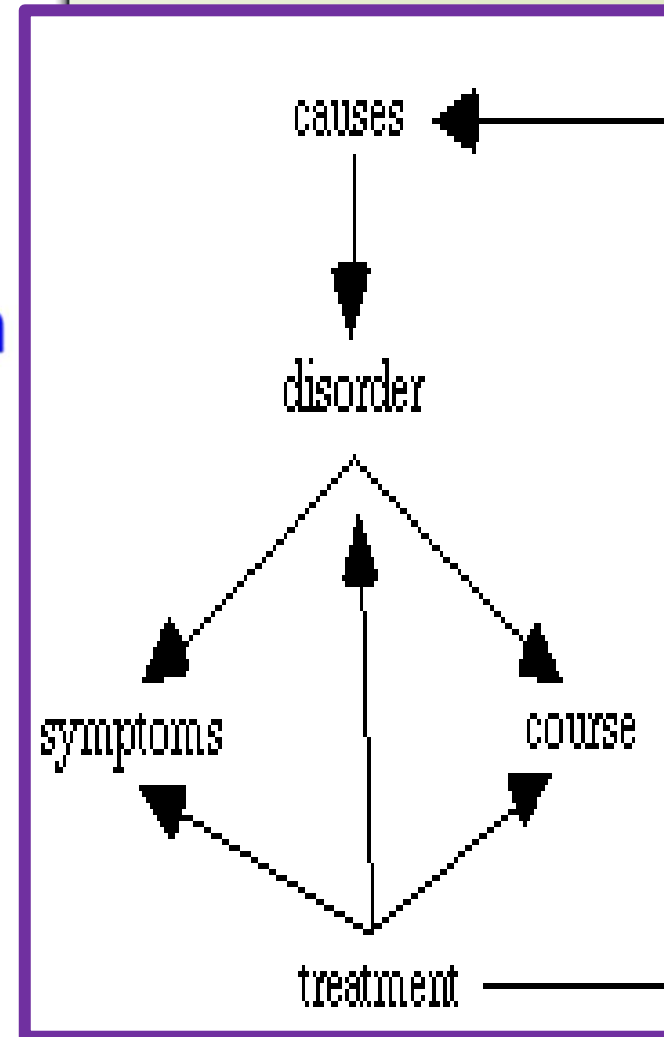
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<https://www.cambridge.org/core/books/abs/essential-public-health/glossary/52ACC0ADB65DBC6A86B6119DE3901467>



CONCEPT OF DISEASE

- Webster defines disease as “a condition in which body health is impaired, a departure from a state of health, an alteration of the human body interrupting the performance of vital functions”.
- The oxford English Dictionary defines disease as “a condition of the body or some part or organ of the body in which its functions are disturbed or deranged”.



CONCEPT OF DISEASE



- Ecological point of view disease is defined as “a maladjustment of the human organism to the environment.”
- The simplest definition is that disease is just the opposite of health: i.e. any deviation from normal functioning or state of complete physical or mental well-being.

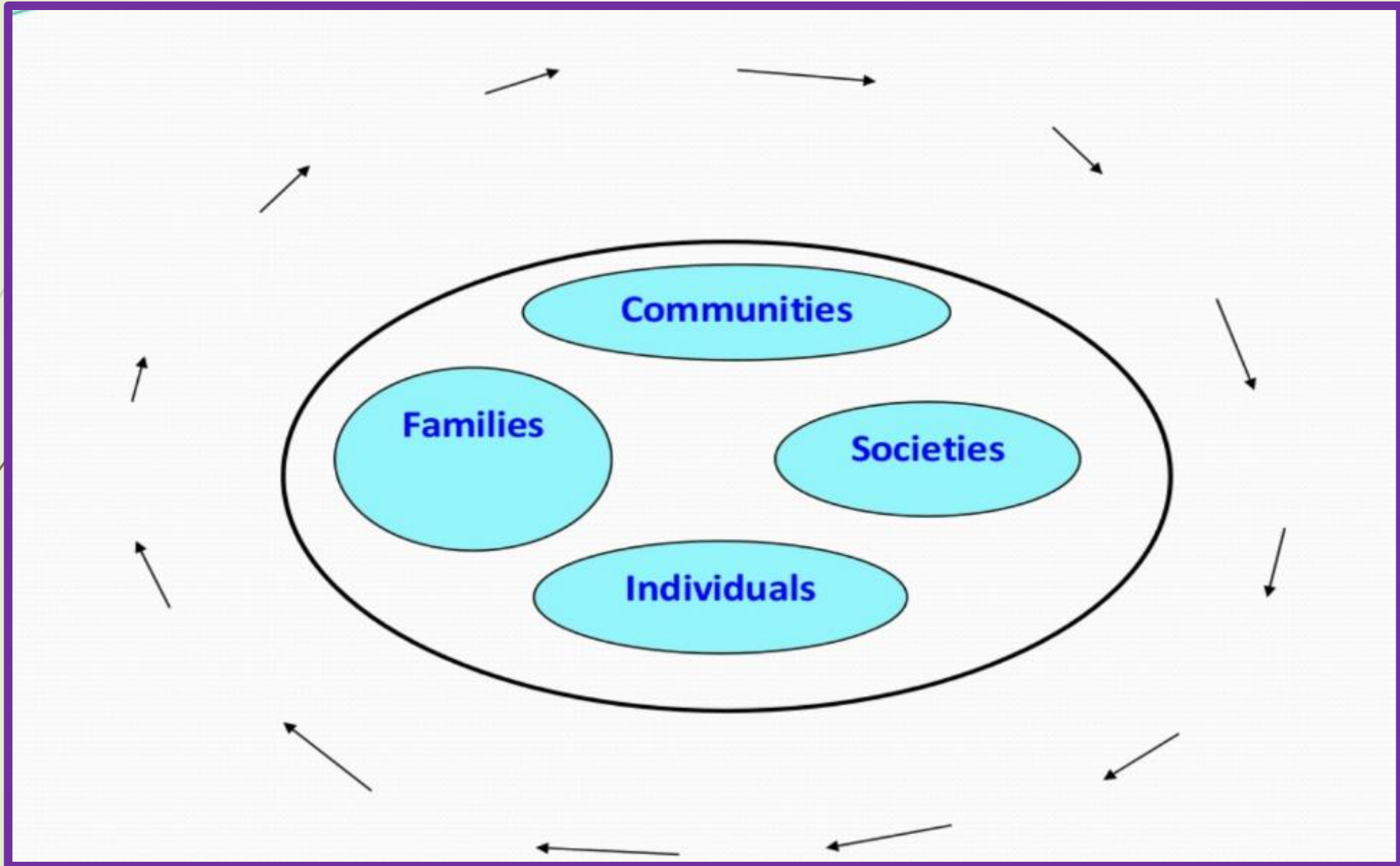
Distinction between Disease, Illness and Sickness

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- The term disease literally means “without ease” (uneasiness), when something is wrong with bodily function.
- Illness refers to the presence of a specific disease, and also to the individual’s perceptions and behavior in response to the disease, as well as the impact of that disease on the psychosocial environment.
- Sickness refers to a state of social dysfunction.

Elements of Health

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DEFINITIONS OF HEALTH

- “The condition of being sound in body, mind or spirit especially freedom from physical disease or pain.” - Webster
- “Soundness of body or mind that condition in which its are duly and efficiently discharged .” - Oxford English

Fundamental health related terms:

Health: state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Illness: refers to the subjective sense of feeling unwell that often motivates a patient to consult a physician.

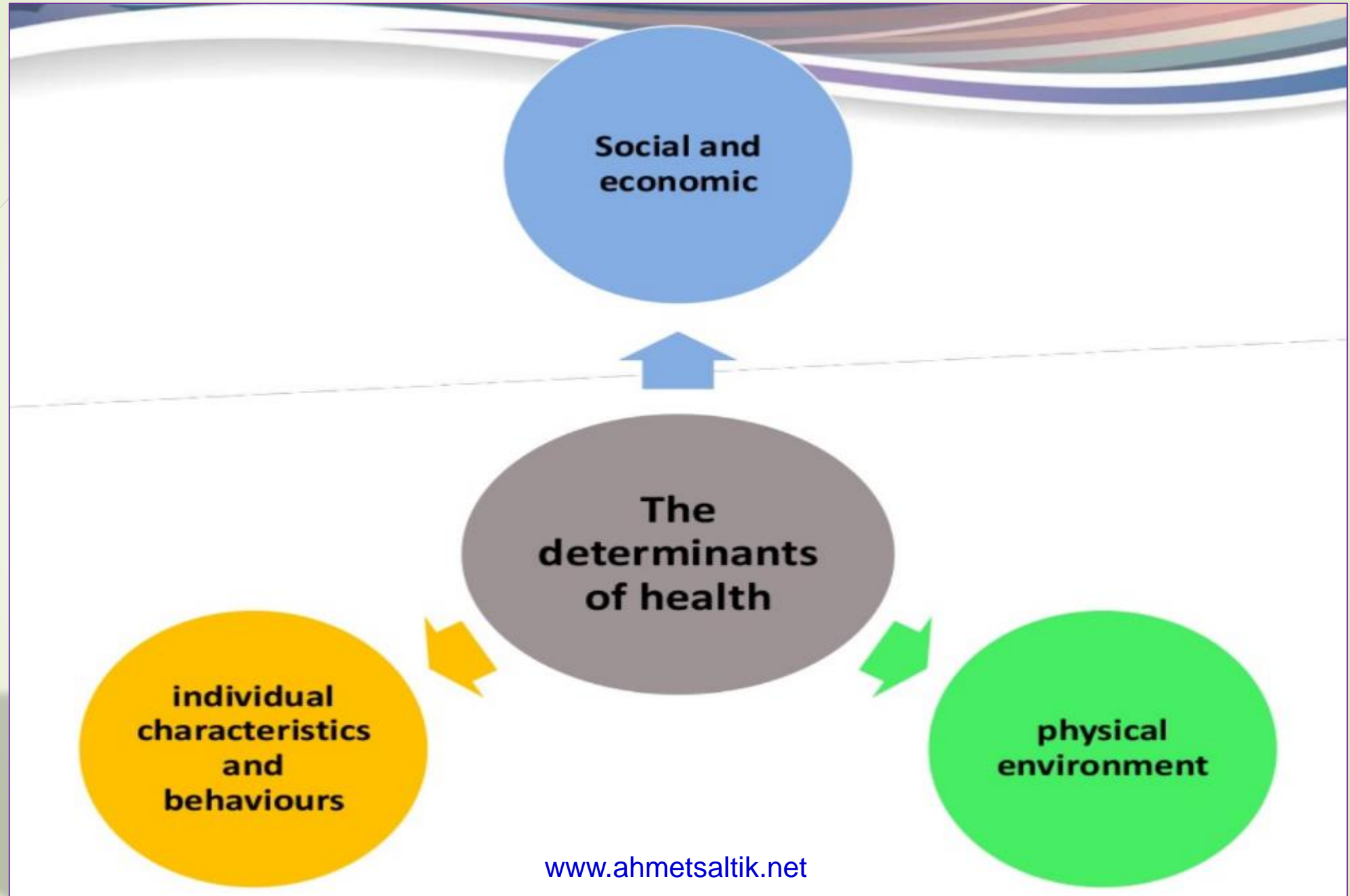
Sickness: refers to socially and culturally held conceptions of health conditions.

Disease: implies a focus on pathological processes that may or may not produce symptoms and that result in a patient's illness.



Public Health

"the science and art of preventing disease, prolonging life and promoting human health through organized efforts and informed choices of society, organizations, public and private, communities and individuals."



BIOLOGICAL DETERMINANTS

- The health of an individual partly depends on the genetic constitutions.
- A number of diseases e.g. chromosomal anomalies, inborn error of metabolism, mental retardation and some types of diabetes are some extent due to genetic origin.

ENVIRONMENTAL FACTORS

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- **Biological:** disease producing agent (e.g. bacteria, virus, fungi), intermediate host (e.g. mosquito, sand fly), vector (e.g. house fly), reservoir (e.g. pig in JE).
- **Physical:**
Air, water, light, noise, soil, climate, altitude, radiation housing, waste etc.
- **Psychosocial:** psychological make up of individual and structure and functioning of society. E.g. habit, beliefs, culture, custom, religion etc.

BIOMEDICAL CONCEPT

- Traditionally, health has been viewed as an “absence of disease”, and if one was free from disease, then the person was considered healthy.
- This concept has the basis in the “germ theory of disease”.
- The medical profession viewed the human body as a machine, disease as a consequence of the breakdown of the machine and one of the doctor’s task as repair of the machine.

ECOLOGICAL CONCEPT

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- Form ecological point of view; health is viewed as a dynamic equilibrium between human being and environment, and disease a maladjustment of the human organism to environment.
- According to Dubos “Health implies the relative absence of pain and discomfort and a continuous adaptation and adjustment to the environment to ensure optimal function.”
- The ecological concept raises two issues, viz. imperfect man and imperfect environment.

PSYCHOSOCIAL CONCEPT

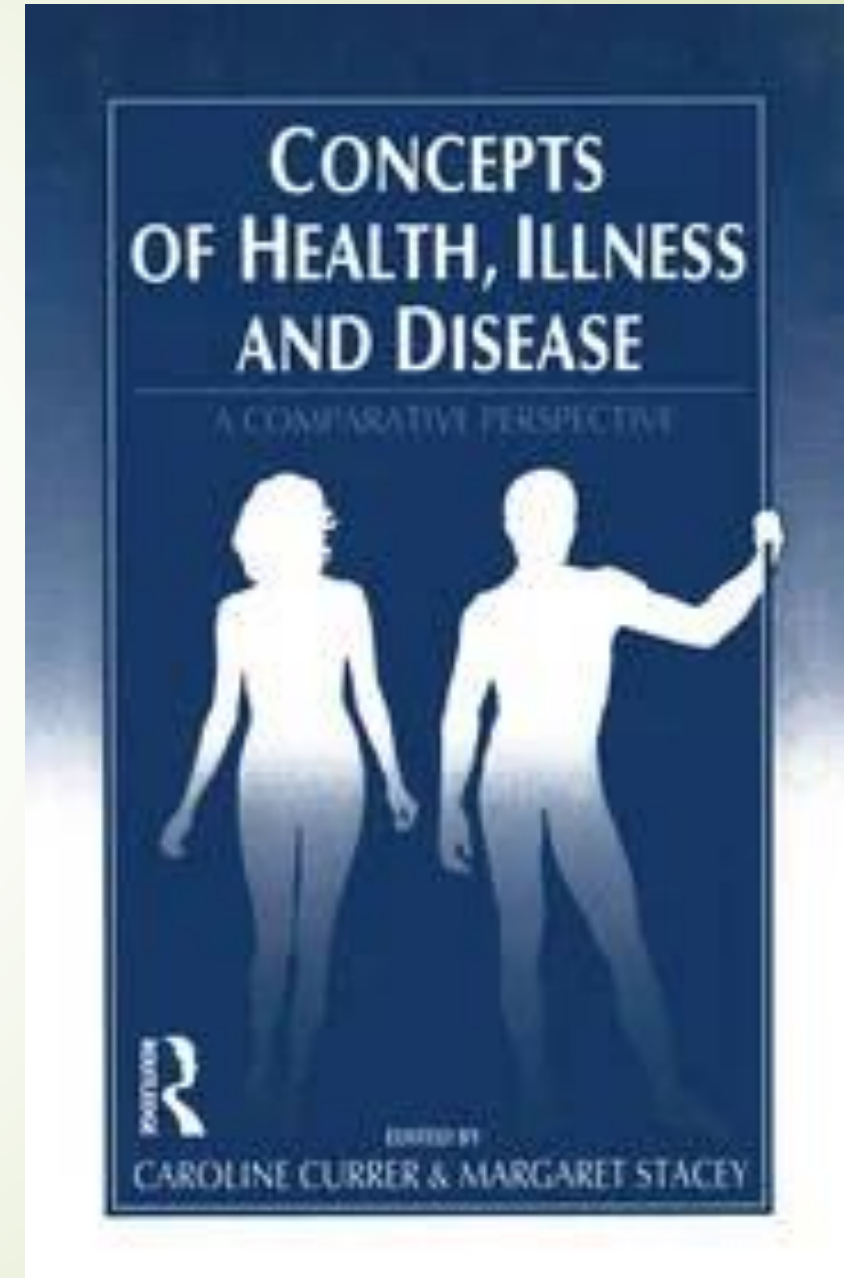
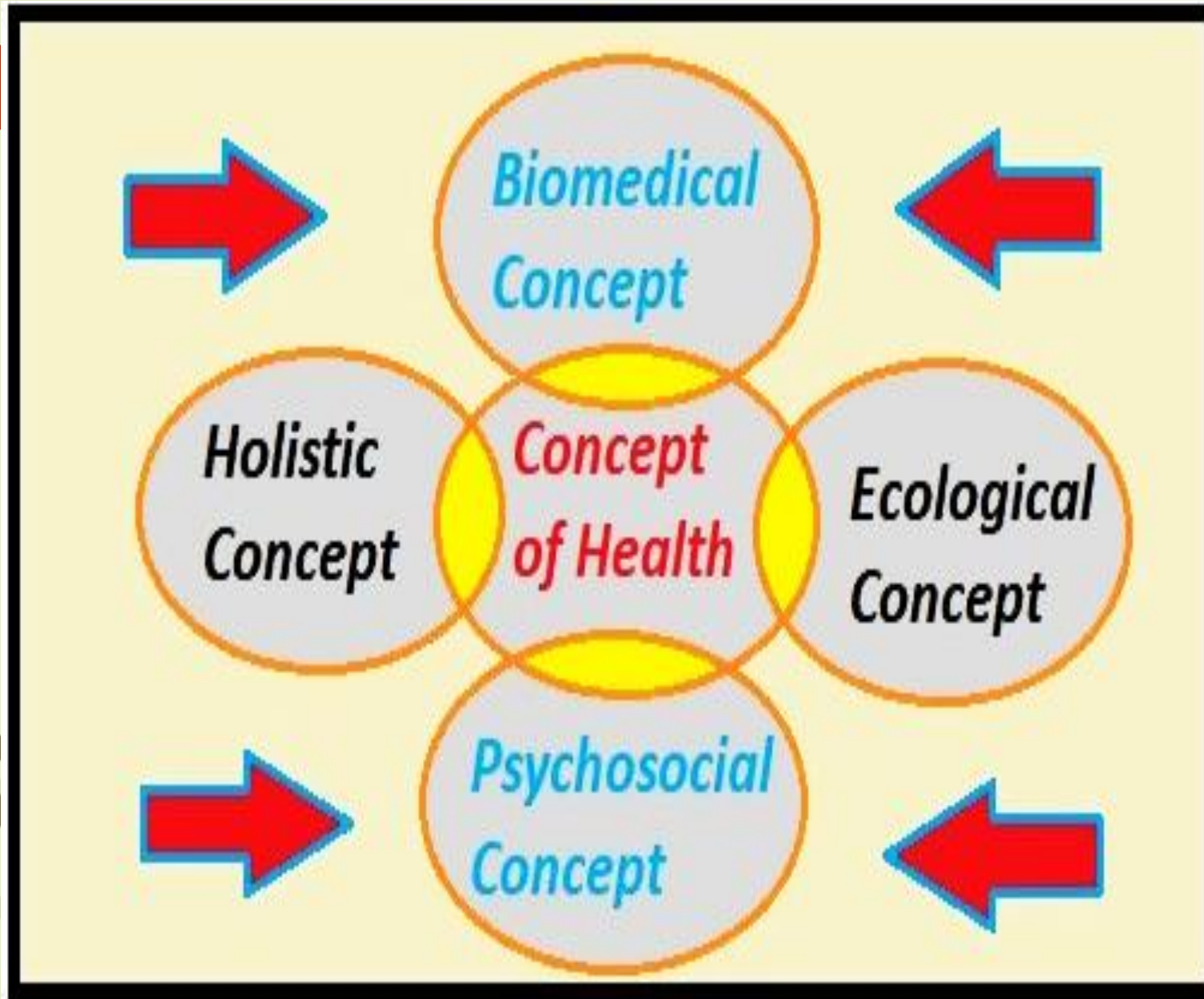
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- According to psychosocial concept “health is not only biomedical phenomenon, but is influenced by social, psychological, cultural, economic and political factors of the people concerned.”



HOLISTIC CONCEPT

- This concept is the synthesis of all the above concepts.
- It recognizes the strength of social, economic, political and environmental influences on health.
- It described health as a unified or multi dimensional process involving the wellbeing of whole person in context of his environment .



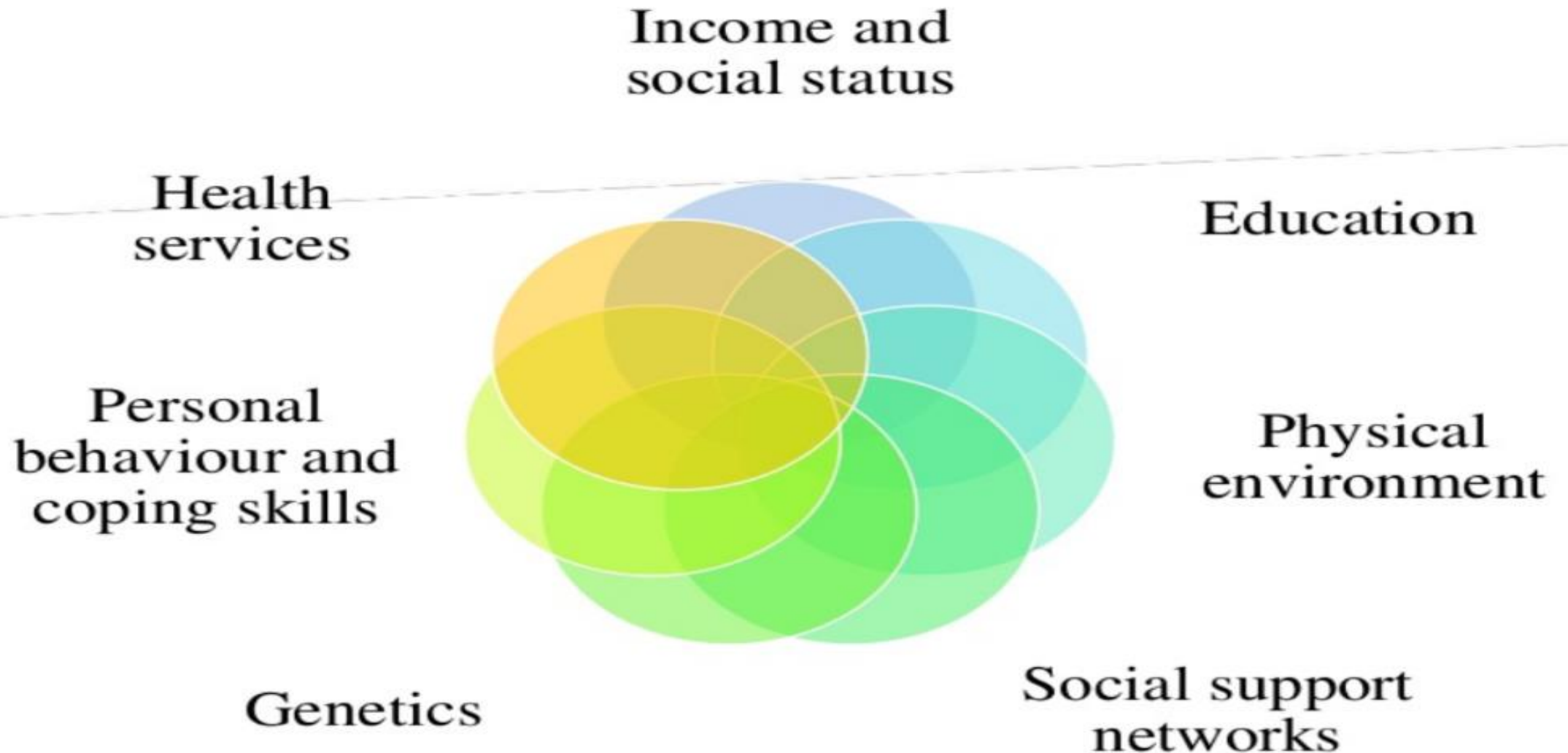
SOCIO-ECONOMIC CONDITIONS

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- It consist of education, occupation and income.
- The world map of illiteracy closely coincides with the maps of poverty, malnutrition, ill health, high infant and child mortality rates.
- The very state of being employed in productive work promotes health, because the unemployed usually show a higher incidence of ill-health and deaths.
- There can be no doubt that economic progress has positive impact factor in reducing morbidity, increasing life expectancy and improving the quality of life.

The determinants of health

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OTHER DETERMINANTS OF HEALTH

- Except above discussed determinants, there are many more determinates of health and disease of an individual and community. These include:
 - Science and technology
 - Information and communication
 - Gender
 - Equity and social justice
 - Human rights etc.

Health indicators:

- 1) Mortality indicators.
- 2) Morbidity indicators.
- 3) Health status (conditions).
- 4) Disability indicators.
- 5) Nutritional indicators.
- 6) Social and mental health indicators.
- 7) Health system indicators.

COVID-19 Fatality Rate

Death Rate = (number of deaths / number of cases) X c

CFR = probability of dying if infected by the virus (%).

This probability differs depending on the age group and country.

1% for World but 0.6% in Turkiye?!



***10
minutes***



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LIFE STYLE

- Behavioral pattern and life long habits e.g. smoking and alcohol consumption, food habit, personal hygiene, rest and physical exercise, bowel and sleeping patterns, sexual behavior



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5 Ps of Public Health (expansion from the 3 Ps)

- **Prevention** (individual and community-focused)
- **Promotion** (voluntary, education, advocacy)
- **Protection** (policies/regulations; enforcement)
- **Population-based** (communities, groups)
- New 5th P: **Preparedness** (e.g., bioterrorism, natural disasters, pandemics)

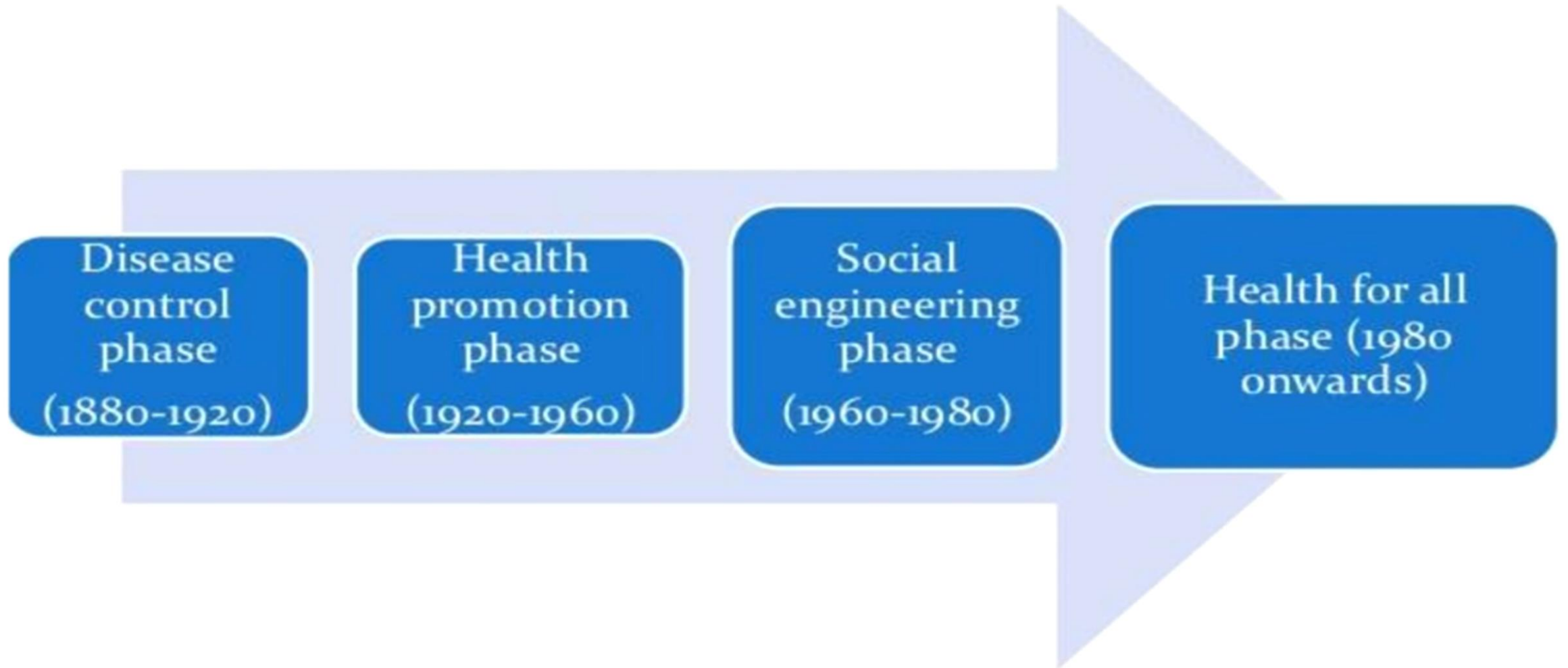
Medicine

- Focus on individuals
- Diagnosis & treatment
- Clinical interventions
- Well-established profession, standardized education & certification
- Clinical sciences integral; social sciences less emphasized
- Experimental studies with control groups: RCTs.

Public Health

- Focus on populations
- Prevention & health promotion
- Environment & human behavior interventions
- Diverse workforce, variable education & certifications
- Social sciences integral; clinical sciences peripheral to education
- Observational studies: case control & cohort studies

Phases of Public Health



4. Health For All (1980-2000 AD)

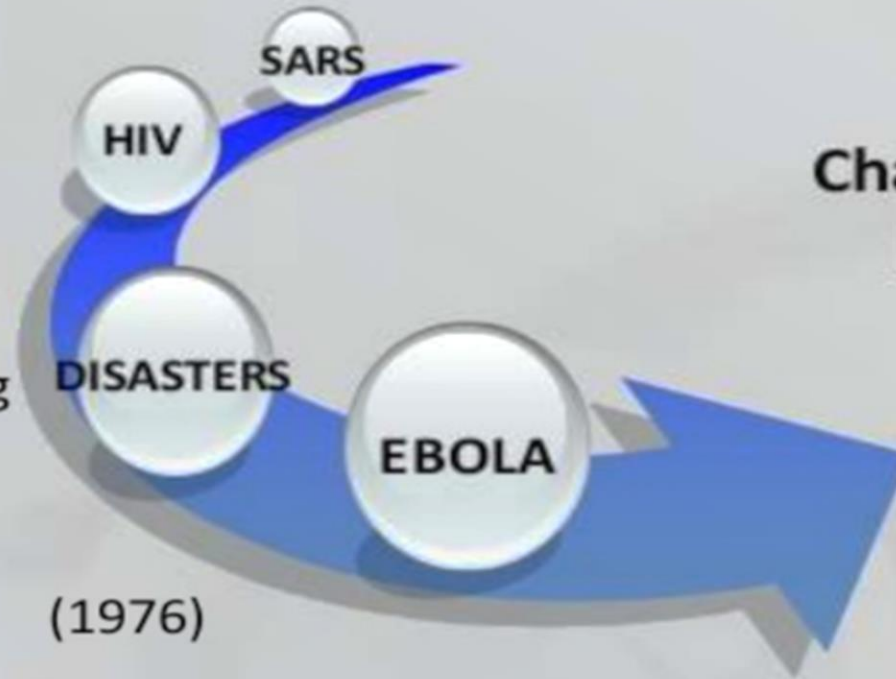
- ✓ In 1977, it was decided in the World Health Assembly to launch a movement known as "Health For All by the year 2000".
- ✓ The fundamental principle of HFA strategy is equity, that is an equal health status for people and countries, ensured by an equitable distribution of health resources.
- ✓ The member countries of WHO at the World Health Assembly defined health for all as:
Attainment of a level of health that will enable every individual to lead as socially and economically productive life

To establish Health For All by 2000 AD by means of **Primary health Care**

(2003)

(1983)

(Most frequenting
Since 1995)



Challenges Confronted by Public Health

Challenges Confronted by Public Health

Epidemiological Transition

Demographic Transition

Environmental Changes

- **Primary** health care
- **Secondary** health care
- **Tertiary** health care

Primary health care

- The **“first” level of contact** between the individual and the health system.
- **Essential health care** (PHC) is provided.
- A majority of prevailing health problems can be satisfactorily managed.
- The **closest** to the people.
- Provided by the **primary health centers**.

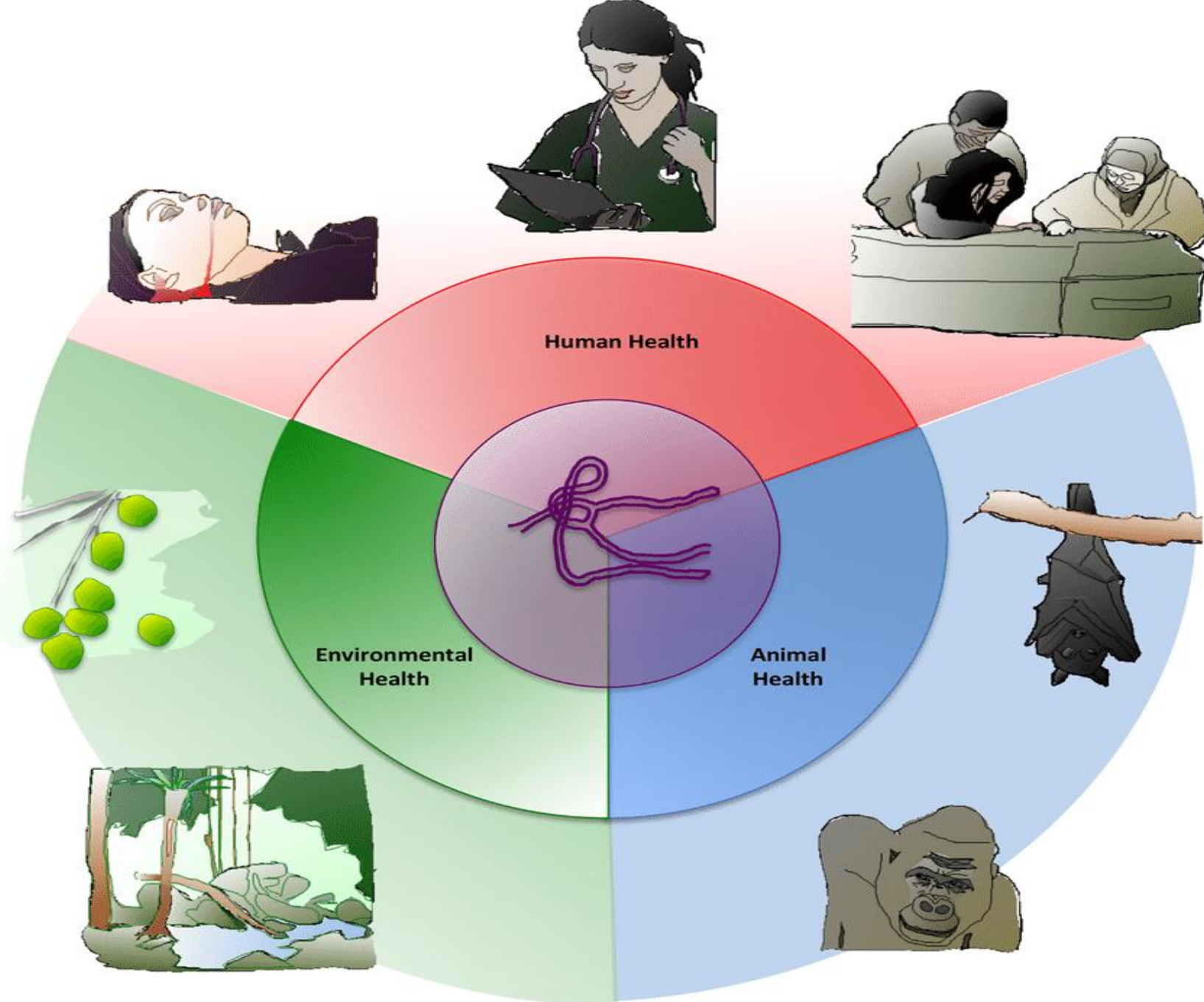


NEW PHILOSOPHY OF HEALTH

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- Health is a fundamental human right.
- Health is essence of productive life.
- Health is inter- sectoral.
- Health is integral part of development.
- Health is central to quality of life.
- Health involves individuals, state and international responsibility.
- Health and its maintenance is major social investment.
- Health is world-wide social goal.



The One Health concept and components.

The One Health concept allows for an emerging infectious disease such as the Ebola epidemic to be viewed and addressed in a tripartite manner: Factors from human (pink), animal (blue), and environmental (green) health are considered in the forecast and control of disease.

DIMENSIONS OF HEALTH

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- Health is multidimensional.
- World Health Organization explained health in three dimensional perspectives: physical, mental, social and spiritual.
- Besides these many more may be cited, e.g. emotional, vocational, political, philosophical, cultural, socioeconomic, environmental, educational, nutritional, curative and preventive..



MENTAL DIMENSION

- Ability to think clearly and coherently. This deals with sound socialization in communities.
- Mental health is a state of balance between the individual and the surrounding world, a state of harmony between oneself and others, coexistence between the relatives of the self and that of other people and that of the environment.
- Mental health is not merely an absence of mental illness.

Features of mentally healthy person

- Free from internal conflicts.
- Well – adjusted in the external environment.
- Searches for one's identity.
- Strong sense of self-esteem.
- Knows himself: his mind, problems and goal.
- Have good self-controls-balances.
- Faces problems and tries to solve them intellectually.



SOCIAL DIMENSION

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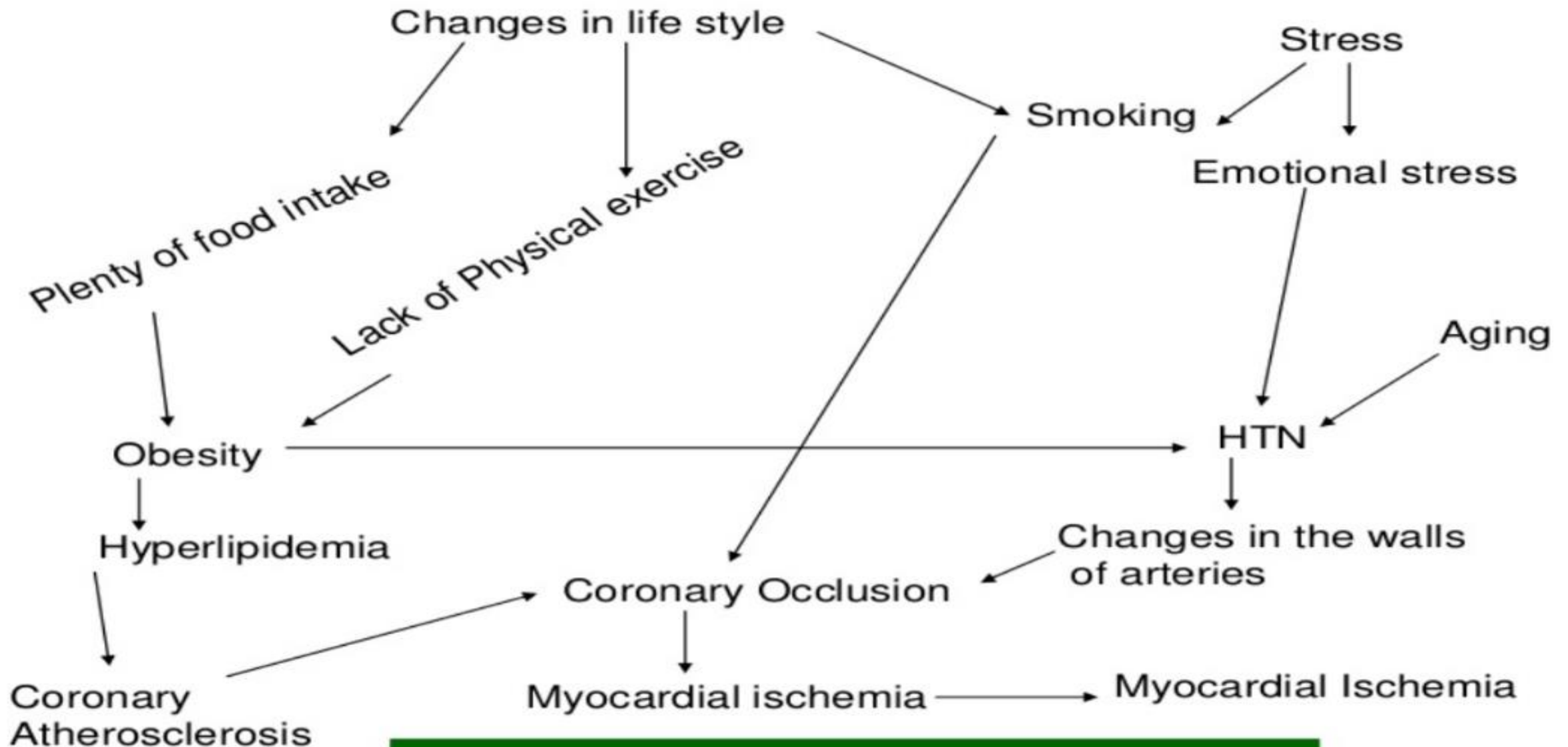
- It refers the ability to make and maintain relationships with other people or communities.
- It states that harmony and integration within and between each individuals and other members of the society.
- Social dimension of health includes the level of social skills one possesses, social functioning and the ability to see oneself as a member of a larger society.

RESPONSIBILITY FOR HEALTH

- **Individual responsibility:** self care for maintaining their own health.
- **Community responsibility:** health care for the people to the health care by the people.
- **State responsibility:** constitutional rights.
- **International responsibility:** Health for All through PHC.

WEB of DISEASE CAUSATION

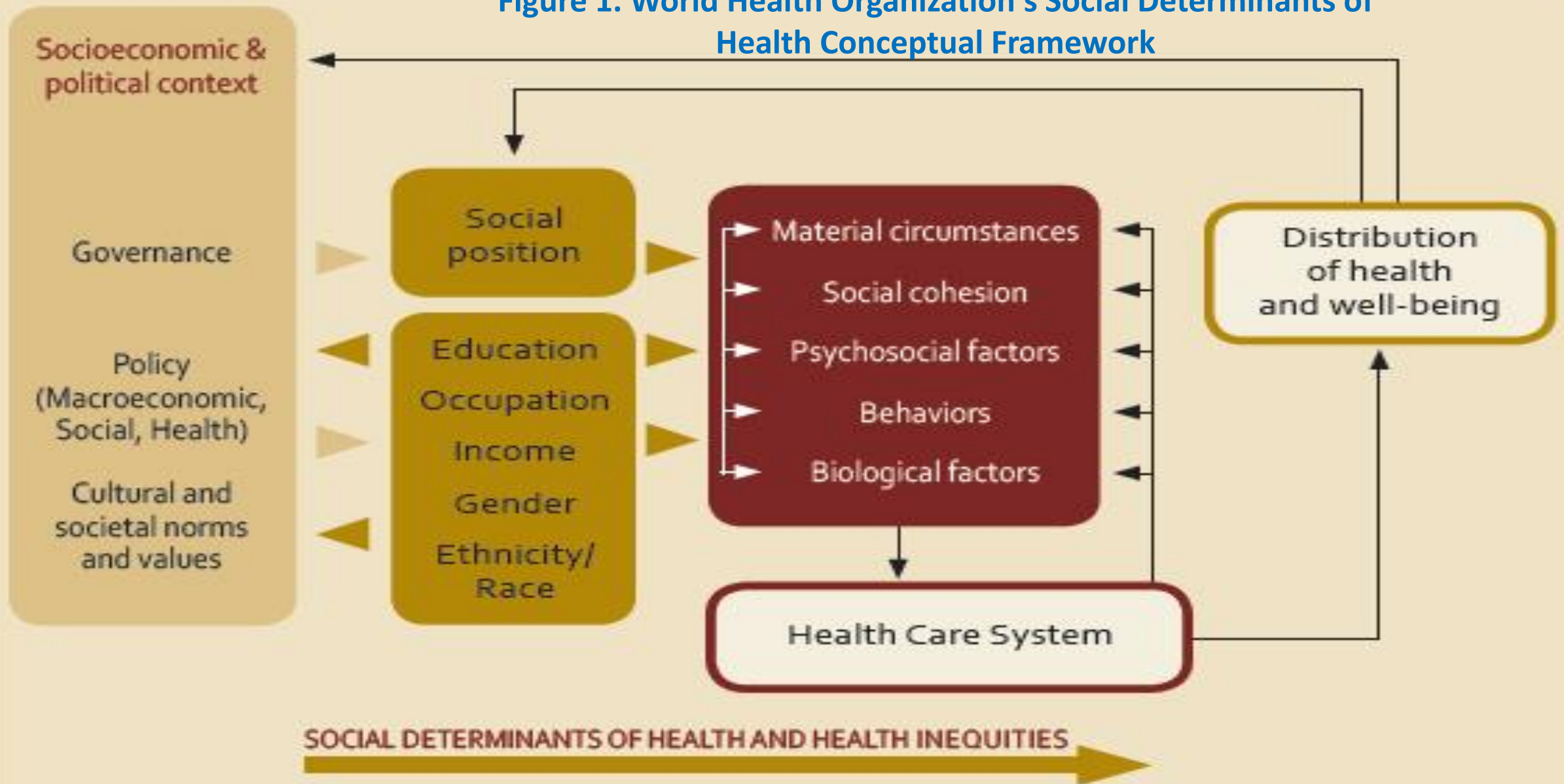
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FIVE COMMON **SHORT COMINGS** OF HEALTH CARE DELIVERY

- **INVERSE CARE:** More inclined to the rich.
- **IMPOVERISHING CARE:** Healthcare expenditure makes one poor.
- **FRAGMENTED AND FRAGMENTING CARE:** Too much specialties, interfere with **COMPREHENSIVE** care.
- **UNSAFE CARE:** Hospital Acquired Infection.
- **MISDIRECTED CARE:** Less budget for preventive services which can tackle 70% of cases of ill-

Figure 1. World Health Organization's Social Determinants of Health Conceptual Framework



Source: Amended from Solar & Irwin, 2007

World Health Organization's Social Determinants of Health Conceptual Framework

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- ❑ **Improve the conditions** of daily life—the circumstances in which people are born, grow, live, work, and age.
- ❑ **Tackle the inequitable distribution** of power, money, and resources—the structural drivers of those conditions of daily life—globally, nationally, and locally.
- ❑ **Measure the problem**, evaluate action, expand the knowledge base, develop a workforce that is trained in the **social determinants of health**, and raise public awareness about the social determinants of health.

CONCEPT OF PREVENTION

- Primordial prevention
- Primary prevention
- Secondary prevention
- Tertiary Prevention

Primordial Prevention :

- Prevention from Risk Factors.
- Prevention of emergence or development of Risk Factors.
- Discouraging harmful life styles.
- Encouraging or promoting healthy eating habits.

Primary Prevention:

- Pre-pathogenesis Phase of a disease.
- Action taken prior to the onset of the disease:
- Immunization & Chemo-prophylaxis

Secondary Prevention:

- Halt the progress of a disease at its incipient phase.
- Early diagnosis & Adequate medical treatment.

Tertiary Prevention:

- Intervention in the late Pathogenesis Phase.
- Reduce impairments, minimize disabilities & suffering.

Tips to help you learn the concepts of health & disease

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- ❑ Understand the definitions : **Health** is defined as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. **Disease** is defined as a disorder of structure or function in a human, animal, or plant, especially one that produces specific signs or symptoms or that affects a specific location and is not simply a direct result of physical injury.
- ❑ Learn about the determinants of health : The **determinants of health** are the range of personal, social, economic, and environmental factors that influence health status. These include factors such as income, education, employment status, social support networks, genetics, and access to healthcare.

Tips to help you learn the concepts of health & disease

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- ❑ **Understand the different models of health :** There are different models of health that have been proposed over time. These include the biomedical model, which focuses on the physical aspects of disease and illness; the biopsychosocial model, which takes into account biological, psychological, and social factors; and the ecological model, which considers the broader social and environmental context in which people live.
- ❑ **Learn about disease prevention :** Disease prevention involves taking action to reduce the risk of developing a particular disease or condition. This can include measures such as vaccination, lifestyle changes (e.g., diet and exercise), and screening tests.

Tips to help you learn the concepts of health & disease

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❖ **Understand the role of healthcare professionals :**

Healthcare professionals play an important role in promoting health and preventing disease. They include doctors, nurses, pharmacists, public health professionals, and others.

❖ **Learn about common diseases :** *There are many different types of diseases that can affect humans. Some common examples include infectious diseases (e.g., flu), chronic diseases (e.g., diabetes), and mental health disorders (e.g., depression).*

❖ **Understand the impact of social determinants on health :**

Social determinants such as poverty, education level, and access to healthcare can have a significant impact on health outcomes.

Tips to help you learn the concepts of health & disease

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- **Learn about global health issues :** Global health issues such as infectious diseases (e.g., HIV/AIDS), malnutrition, and maternal and child health (MCH) are important topics in public health.
- **Understand the importance of Evidence-Based Medicine :** Evidence-based medicine involves using the best available evidence to inform clinical decision-making.
- **Learn about healthcare systems :** Healthcare systems vary widely across countries and regions. Understanding how healthcare systems work can help you better understand how to promote health and prevent disease.

UN UDHR art. 25...

1. *Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.*

2. **Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.**



Thank You

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Course Summary

During this course, you have learned
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- ***Realise the exact definitions of both concepts in terms of health & disease***
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Resources and Additional Reading

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