

**AL MUSTAQBAL UNIVERSITY**

**College of Pharmacy / Fourth Stage**



# **Public Health**

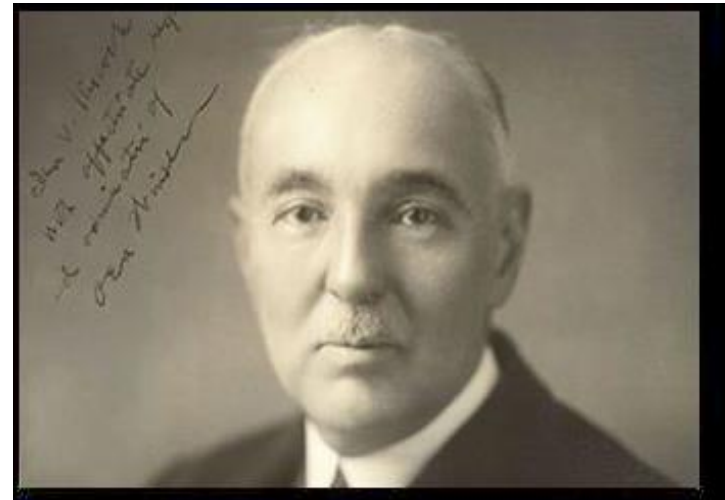
## **(L 2) Dimensions of public Health**

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# Definition of Public Health

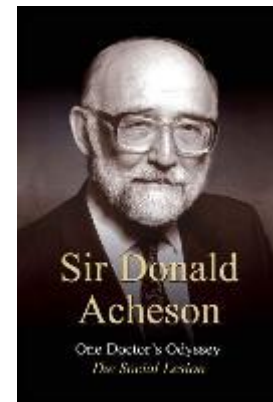
- ‘Public health is the science and art of preventing disease, prolonging life and promoting physical health and efficiency **through organised community efforts** for the sanitation of the environment, the control of community infections, the education of the individual in principles of personal hygiene, the organisation of medical and nursing service for the early diagnosis and preventive treatment of disease, and the development of social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health’. (Winslow, 1920)

Charles-Edward Amory Winslow (1877 – 1957)



# Definition of Public Health

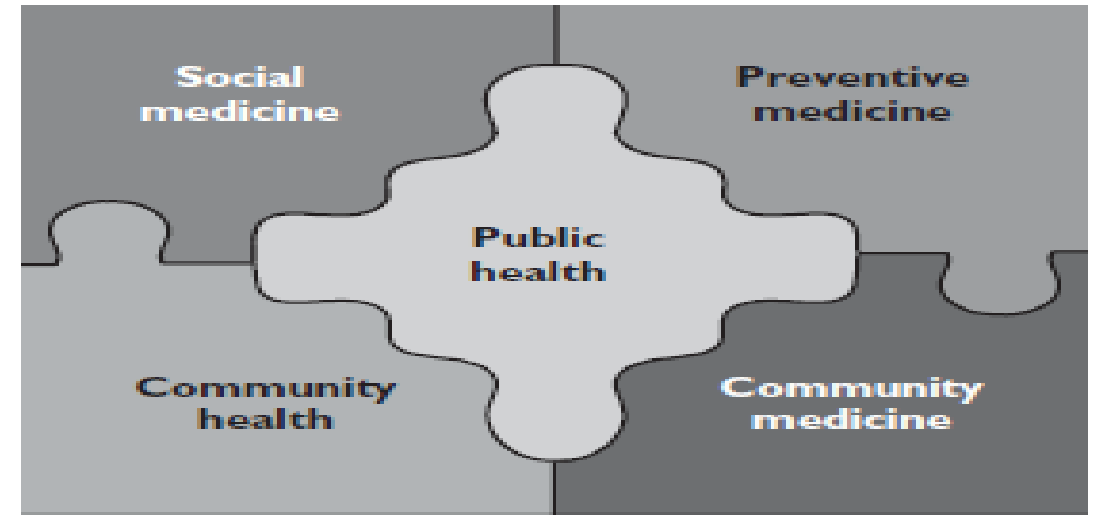
- Sir Donald Acheson in 1988 **defined it** as: ‘the science and art of preventing disease, prolonging life and promoting, protecting and improving health through the **organised efforts of society**’
- The field pays special attention to the social context of disease and health, and focuses on improving health through society-wide measures like vaccinations, the fluoridation of drinking water, or through policies **such as** seatbelt and non-smoking laws.
- Donald Acheson Report, 1988, UK



# THE DIMENSIONS OF PUBLIC HEALTH

The concepts contained in the four terms that are commonly used to describe different aspects of public health:

- Preventive medicine
- Social medicine
- Community health
- Community medicine

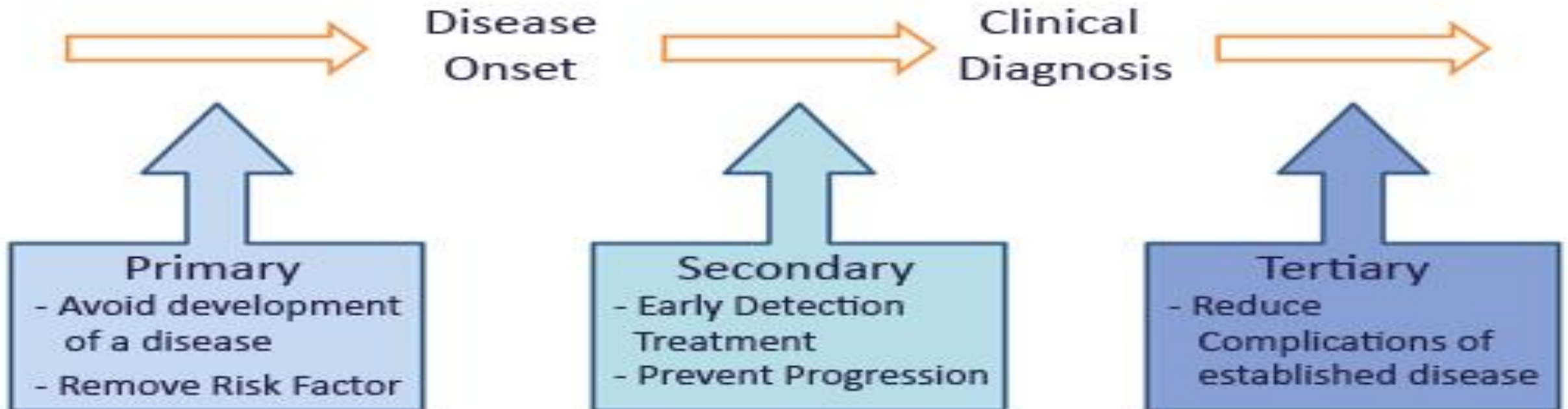


## PREVENTIVE MEDICINE

- **Prevention is better than cure** is one of the prime messages of public health. It differentiates public health from the clinical disciplines that are primarily involved with the care of the sick, whilst **public health emphasizes the avoidance of illness.**
- **Prevention** was initially construed **narrowly** in terms of protective measures like **vaccination and improved nutrition that target only healthy people with the aim of preventing the onset of disease.**

This concept was extended so that prevention classified into **three levels** later to be differentiated into **five stages** .

## Levels of Prevention Strategies



## Three levels of prevention

### PRIMARY

- *Target population:* entire population with special attention to healthy individuals
- *Objective:* prevent onset of illness
- *Methods:* education, immunization, nutrition, sanitation, etc.

### SECONDARY

- *Target population:* sick individuals
- *Objective:* early diagnosis and treatment to prevent further damage to the individual and in cases of infectious diseases, spread to the community
- *Methods:* screening of high risk groups e.g. Pap smears, sputum examination for TB; monitoring of vulnerable groups – children, pregnant women

### TERTIARY

- *Target population:* sick patients
- *Objective:* reduce damage from disease and restore function
- *Method:* clinical care and rehabilitation

## Five stages of prevention

### 1 *General health promotion*

- *Target population:* entire population with special attention to healthy individuals
- *Objective:* prevent onset of illness
- *Methods:* education, nutrition, sanitation, life style changes, etc.

### 2 *Specific prophylaxis*

- *Target population:* entire population with special attention to healthy individuals
- *Objective:* prevent onset of specific diseases
- *Methods:* education, immunization, nutritional supplement (vitamin A, iodine), chemoprophylaxis (e.g. against malaria)

### 3 *Early diagnosis and treatment*

- *Target population:* sick individuals
- *Objective:* early diagnosis and treatment to prevent further damage to the individual and in cases of infectious diseases, spread to the community
- *Methods:* screening of high risk groups e.g. Pap smears, sputum examination for TB, blood test for HIV; monitoring of vulnerable groups – children, pregnant women

### 4 *Limiting damage*

- *Target population:* sick patients
- *Objective:* limit damage from disease
- *Methods:* skilled clinical care and social support to limit physical and social damage from the disease

### 5 *Rehabilitation*

- *Target population:* convalescent patients
- *Objective:* restore function and capability
- *Methods:* physical and social rehabilitation

**Primordial prevention** focuses on preventing the development of risk factors for chronic diseases before they even occur. The four pillars of primordial prevention are healthy diet, physical activity, tobacco control, and alcohol control. By focusing on these pillars, individuals can significantly reduce their risk of developing chronic diseases such as heart disease, diabetes, and cancer.

### **SOCIAL MEDICINE** (*'The poor die young'*)

- The rise of social medicine coincided with increasing realization of the links between social status and the health of individuals and communities.
- Statistical analyses of **mortality** and **morbidity** data show strong correlation between the social stratification in society and the pattern of health and disease.
- The objective of social medicine is to identify the social determinants of health and disease in the community and to devise mechanisms for alleviating suffering and ill health through social policies and actions. Social medicine is based on certain fundamental assumptions:

## **SOCIAL MEDICINE**

- Health as a birthright. Everyone has the right to enjoy the highest possible level of health.
- The responsibility of the state. It is the duty of governments to ensure that the people have the basic elements that would enable families and individuals to maintain good health and that they have access to good quality health care.
- Development and health are inter-related. Good health promotes development, and development promotes health.
- Education promotes health. The strong association between health and level of education is particularly marked with regard to women's education.
- Social factors have a profound influence on health. Culture, behaviour, social organization, allocation of family resources, healthcare seeking behaviour, etc.



## Health and human behavior

- Human behaviour is an important dimension of social medicine. The link between health and human behaviour is a major area of interest in public health.
- The link between lifestyle and health is gaining more attention as **chronic diseases** increasingly dominate the epidemiological pattern. The risk factors associated with cancers, cardiovascular diseases, diabetes and other chronic diseases relate to such lifestyle choices as the use of tobacco and alcohol, diet, nutrition and exercise.
- The pandemic of HIV/AIDS has highlighted the health importance of sexual behaviour, making sex literally a matter of life and death: life in its reproductive function and death in its association with the risk of acquiring deadly diseases.

## **COMMUNITY HEALTH**

Community health deals with the services that aim at protecting the health of the community. The interventions vary from environmental sanitation including vector control to personal health care, immunization, health education and such like.

## **COMMUNITY MEDICINE**

This usually refers to services that are provided at the community level and is now often encompassed in the new term primary care. Community physicians, nurses and other health-care personnel are involved in providing care at clinics, health centers and in people's homes.

## **MODERN PUBLIC HEALTH**

The modern concept of public health includes all these elements – preventive medicine, social medicine, community medicine, community health.

Important **characteristic features of** modern public health include the following:.

- multidisciplinary;
- multisectoral;
- evidence-based;
- equity-oriented.

## **MULTIDISCIPLINARY**

Although medical practitioners constitute a vital segment of the public health practitioners, the contributions from other health-related disciplines are absolutely essential for achieving the goals of public health. Thus, the public health team would include, as required, doctors, nurses, midwives, dentists and pharmacists; anthropologists, economists and other social scientists; philosophers, ethicists and other experts on moral sciences, as well as educationists, communications experts and managers

## **MULTISECTORAL**

The health sector has two distinct roles. It is primarily responsible for planning and delivering health services. It also has an important leadership function in mobilizing intersectoral action. It should work with other ministries: with public works on water and sanitation; with education on the health of school children and health promotion; with transport on the control of road traffic accidents; and with agriculture on food security, nutrition, use of pesticides and the control of zoonotic infections.

## **EVIDENCE-BASED**

Modern public health demands that decisions should be science-based and knowledge-based. As far as possible, policy-making should be made only after objective analysis of relevant information. Policy-makers have the responsibility to ensure that their decisions are based on the best available scientific evidence. Both researchers and policy-makers with their common interest in promoting the health of the population need to work closely together in generating and using sound evidence as the basis of decision-making.

## EQUITY-ORIENTED

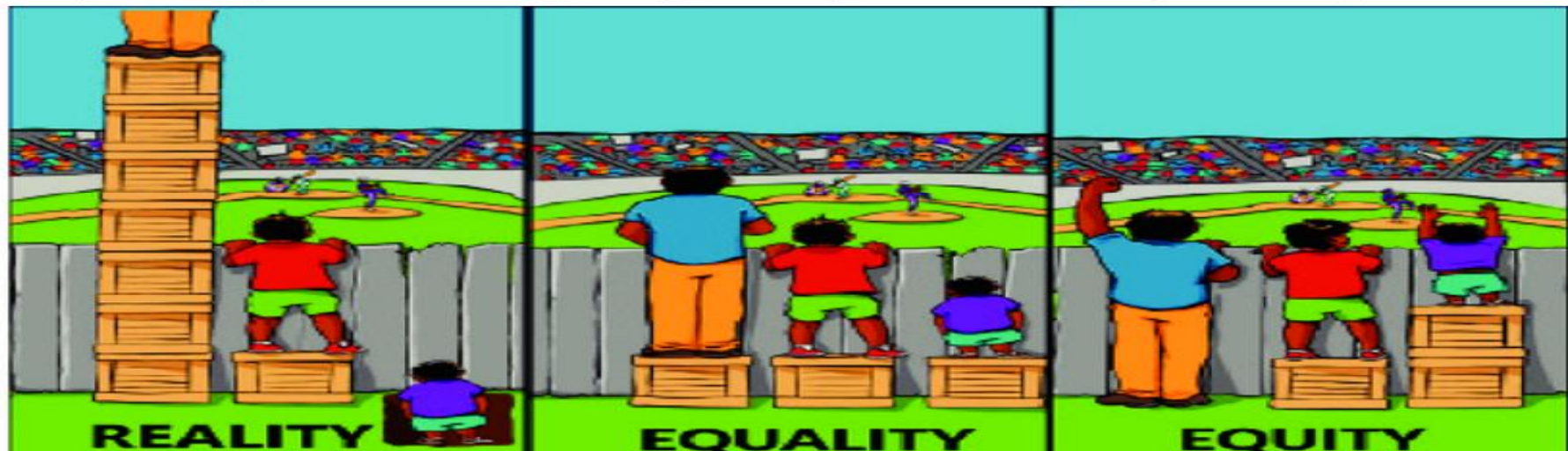
Public health programs must be designed to promote equity as the ultimate goal of all health action. The aim is to ensure for each member of society the highest possible level of health.

### Defining equality and equity

*Equality* means each individual or group of people is given the same resources or opportunities.

*Equity* recognizes that each person has different circumstances, and allocates the exact resources and opportunities needed to reach an equal outcome.

### Equality and equity as political principles



**Health care system ( HCS) in Iraq** is managed by ministry of health MOH and is designed in three major levels : Primary , Secondary , and Tertiary.

**Primary Health care system PHC** is consist of three elements:

1.Primary health care centers which are distributed in the centers of the cities, peripheries , and in the rural areas. they are responsible for promotion of health programs and vaccination schedules.

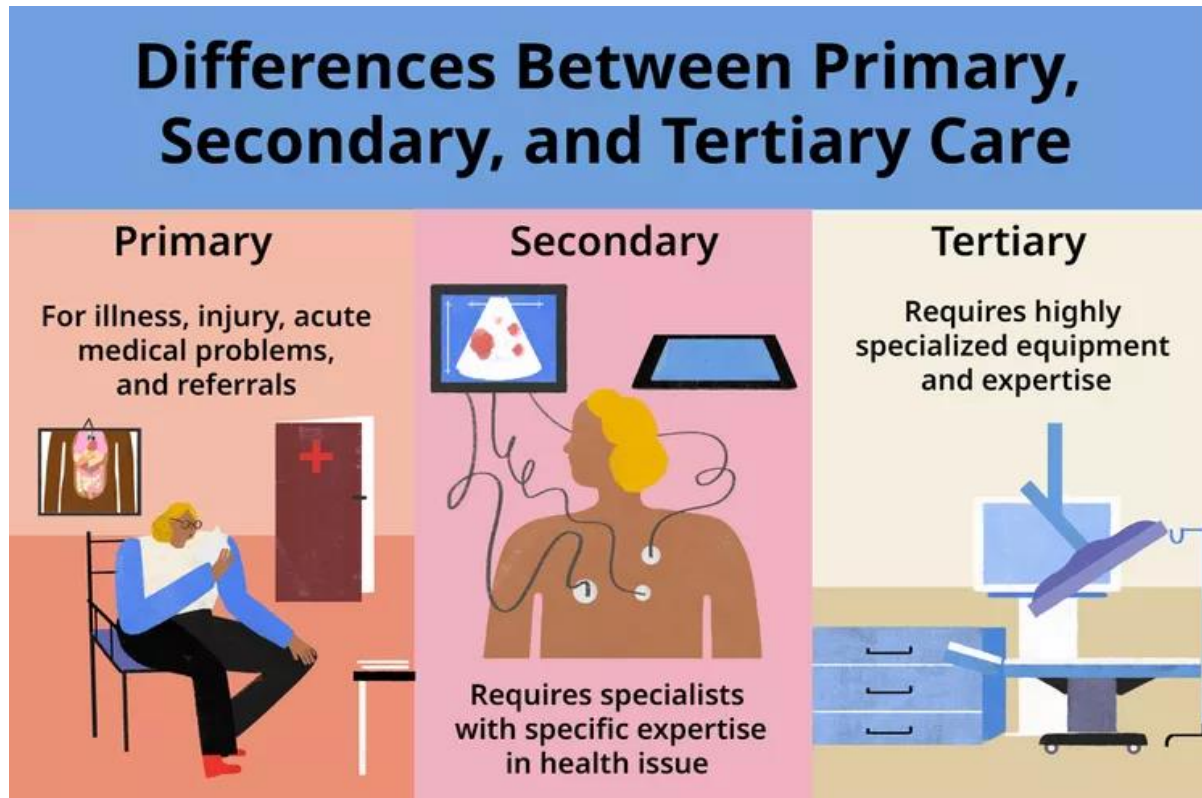
2. Primary Health care sectors which manage many primary health care centers and divide the big and small cities to geographical zones.

3. Public Health Department in the Health Directorate in each Province.

Ministry of health managing all the Health Directorates.

**Secondary Health care system** represented by the general (50-200 beds) and teaching hospitals.

**Tertiary Health care system** represented by the specialized hospitals and specialized centers in the large ( 200 and more beds) and teaching Hospitals.



# THANK YOU!

