

---

# Concept of Health and Disease

---

The view of health involves visiting nurses, immunisations in child, sewage, drinking water and drains, water systems.

---

## DEFINITION

---

### Health

Winslow in 1920 defined health as 'The science and art of preventing disease, prolonging life and promoting physical and mental efficiency through organised community efforts for the sanitation of the environment, the control of communicable infections, the education of the individuals in personal hygiene, organisation of the medical and nursing services for the early diagnosis and preventive treatment of the disease, and the development of the social machinery to ensure everyone the standard of living adequate for the maintenance of health, so organising these benefits as to enable every citizen to realise his birthright of health and longevity'.

---

## CONCEPT AND EVALUATION OF PUBLIC HEALTH

---

From long times man has been interested in doing efforts to control diseases. Various efforts have been made in order to bring relief to the sick.

### Early Age History

In the recorded history India has been one of the most ancient civilisation. Excavations in the Indus valley like Harappa showed

relics of planned cities with drainage, houses, public baths of baked bricks suggesting the practices of environmental sanitation, by ancient people as far back as 3000 BC.

Around 1400 BC, the Ayurveda and the Siddha system of medicine came into existence. Between 600 BC and 600 AD, the medical education was introduced in the ancient universities of Taxila and Nalanda. A hospital system was also developed. Between 650 AD and 1850 AD the Unani system was developed.

#### **Public health in British era and postindependence era**

- 1859 : Establishment of Public Health took place
- 1880 : Vaccination act passed
- 1909 : Central Malaria Bureaus founded
- 1930 : All India Institute of Hygiene and Public Health established
- 1943 : Bhore Committee appointed by the Government of India
- 1947 : Ministries of Health established in Centre and States
- 1948 : India became the member of WHO
- 1951 : First 5-Year Plan started
- 1955 : National Filariasis Control Programme started
- 1959 : Mudaliar Committee was appointed to survey progress in the field of health
- 1962 : Central Family Planning Institute was established in Delhi
- 1977 : Eradication of smallpox declared
- 1981 : Global strategy for health for all adopted
- 1989 : Blood Safety Programme launched
- 1992 : Child Survival and Safe Motherhood Programme was launched
- 1995 : ICDS renamed as Integrated Mother and Child Development Services
- 1996 : Pulse Polio Immunisation Programme introduced
- 2000 : National Population Policy announced

Evaluation of public health involves the following parameters:

- Use of health centre
- Case finding
- Use of community health council

**Use of Health Care**

1. Health centres are the buildings of the community to house healthy administrations and a number of outpatient services not easily found in a hospital.
2. It is located in the central part of the community.
3. In addition a small auditorium is for public health meeting.
4. One health centre serves around 50,000–1,00,000 to one lakh people.
5. Health units may be present in certain public schools.

**Case Finding/Screening**

1. Apparently healthy populations for cases of early disease are searched.
2. The objective involves to cover as large a population as possible with as simple a test to get useful results.

**Community Health Council**

1. It consists of members representing key people in the community from both voluntary and government agencies and the community at large.
2. Essential feature of good public health practice is a broad desire on the part of people in all walks of life to see the health programmes as a good one to understand it.
3. These councils are associated with community fund raising efforts, providing a forum for the exchange of information between various health agencies and the public for the development of new ideas.

---

**CONCEPT OF PREVENTION AND CONTROL OF DISEASE**

---

**Concept of Control**

**Disease control** aims at reducing the incidence of disease, risk of transmission, effects of infection and the financial burden to the community.

In disease control the agent causing disease is permitted to persist in the community at such a level that it stops to be a public health problem according to the tolerance of the local population.

**Disease elimination** aims to obtain an intermediate goal called regional elimination. Elimination is used to describe the interruption of transmission of the disease, e.g. elimination of measles, polio, diphtheria from large geographical areas.

**Disease eradication** means to tear out by roots or termination of all transmission of infection by extermination of the infectious agent. Eradication is an absolute process. For example, smallpox has been eradicated; no other disease other than it has been completely removed.

**Monitoring and surveillance:** Monitoring is the performance and analysis of routine measurements aimed at detecting changes in the environment.

*Example:* Monitoring of air pollution, water quality, growth and nutritional status.

**Surveillance** means to watch over with great attention, authority. The objectives are to provide information about new and changing trends in the health status of the population, e.g. mortality, morbidity and to provide timely warning of public health disasters so that interventions can be mobilised.

**Sentinel surveillance:** No routine notification system can identify all the cases of infections or diseases. The method for identifying the missing cases and thereby supplementing the notified cases is required. This is known as sentinel surveillance. The sentinel data is extrapolated to the entire population to estimate the disease prevalence in the total population. The advantages of such a system are that the reporting biases are minimised.

**Evaluation of control** means the process by which results are compared with the intended objectives. Evaluation is considered during planning and implementation stages of a activity.

## CONCEPT OF PREVENTION

The objective of preventive medicine is to oppose the cause and thereby the disease process.

### Levels of Prevention

Prevention is broad-based and divided into four levels:

1. **Primordial level:** This is primary prevention in its purest sense, that is prevention of emergence or development of risk factors in countries or population groups in which they have

not yet appeared, e.g. many adult health problems like obesity, hypertension have their early origin in childhood stage because that is the time when lifestyle habits are formed.

2. **Primary prevention:** It is defined as the action taken prior to the onset of the disease which removes the possibility that the disease will ever occur in future. This concept is now applied to the prevention of chronic diseases such as hypertension or cancer. WHO has recommended the following approaches for the primary prevention of the disease where the risk factors are established:
  - **Mass strategy:** It is directed to the whole population irrespective of individual risk levels.
  - **High-risk strategy:** It aims to bring preventive care to individuals at the special risk. This requires detection of individuals at high-risk by the optimum use of clinical methods.
3. **Secondary prevention:** It is defined as action which stops the progress of a disease at its incipient stage and prevents any complications.
4. **Tertiary prevention:** When the disease process has advanced beyond its early stages, it is still possible to accomplish prevention by what might be called tertiary prevention. This includes all measures available to reduce disabilities, minimise suffering caused by the existing departures from good health and to promote the patient's adjustment to irremediable conditions.

---

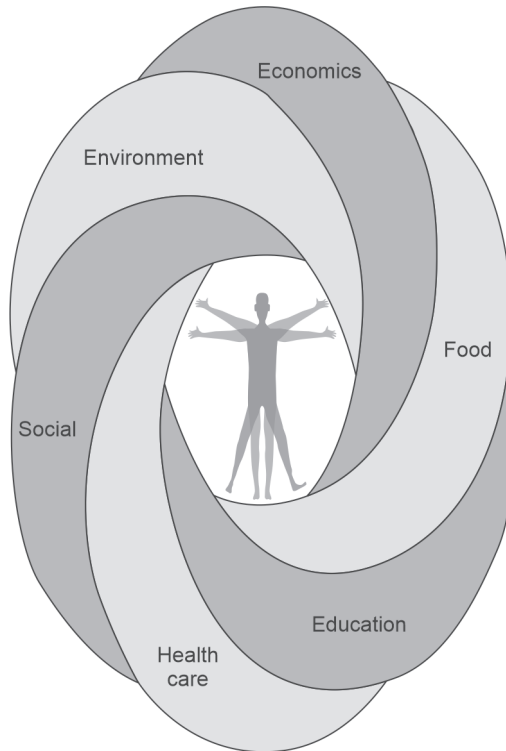
## SOCIAL CAUSES OF DISEASE AND SOCIAL CAUSES OF SICK

---

As our health system moves toward value-based models which incentivise positive results rather than individual procedures and treatments, healthcare industry leaders increasingly are regarding the social determinants of health (SDOH) as critical components of these efforts. By concentrating on these facets of well-being in tandem with medical care, providers are taking a holistic view of patients and overall population health to enhance patient care, promote superior outcomes, and drive value in healthcare organisations.

**WHAT ARE THE SOCIAL DETERMINANTS OF HEALTH?**

SDOH are the complex circumstances in which individuals are born and live that impact their health. They include intangible factors, such as political, socioeconomic, and cultural constructs, as well as place-based conditions including accessible healthcare and education systems, safe environmental conditions, well-designed neighbourhoods, and availability of healthful food.



**Fig. 1.1:** Social determinants of health

**Examples of social determinants of health**

- Income level
- Educational opportunities
- Occupation, employment status, and workplace safety
- Gender inequity
- Racial segregation
- Food insecurity and inaccessibility of nutritious food choices

- Access to housing and utility services
- Early childhood experiences and development
- Social support and community inclusivity
- Crime rates and exposure to violent behaviour
- Availability of transportation
- Neighbourhood conditions and physical environment
- Access to safe drinking water, clean air, and toxin-free environments
- Recreational and leisure opportunities.

### **Common Risk Factors**

- Smoking
- Poor diet
- Injuries
- Sedentary lifestyle
- Stress
- High alcohol consumption.

### **Cultural Beliefs**

Behind many core problems there are few core beliefs and a few key attitudes, many of them originates from the culture in which an individual is grown up or raised; this causes most of the damage. When clients search for an explanation for their behaviours they usually choose the cultural attribution first.

#### *The Sociology of Health and Illness*

It involves the examination of interaction between society and health to see how social life has an impact on mortality and morbidity rate, and *vice versa*. Sociologist has demonstrated that the spread of disease is influenced by the socioeconomic status of an individual, ethnic traditions or beliefs or other cultural factors. There are obvious differences in the pattern of health and illness across society, over time, and within particular society times. There has historically been a long-term decline in mortality within the industrialised societies. Life expectancies are higher in developed rather than in developing or underdeveloped societies.

#### *Basic Social Factors and Health*

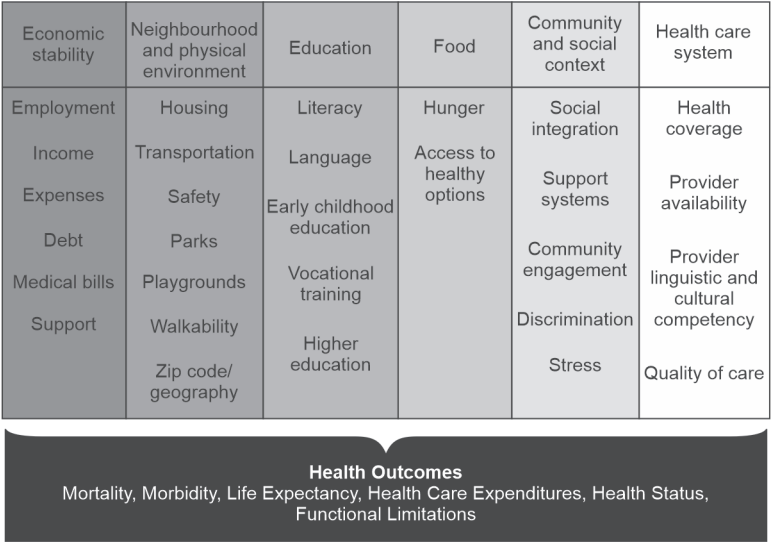
Well documented that vulnerable groups have less access to health services.

*Socioeconomic Status and Health*

Individuals in lower socioeconomic groups have more stress and have more risk of illness comparatively.

**Gender and Health**

Women on an average live longer than man. The explanations for these differences are biological in nature.



**Fig. 1.2:** Factors related to causes of diseases