Social Epidemiology

# Social epidemiology

The study of the distribution and determinants of health-related states and events in populations and the application of this study to control of health problems.

## Or

The study of the distribution of a disease or a physiological condition in human populations and of the factors that influence this distribution.

# Social epidemiology study:

* epidemiologists’ study sick people
* epidemiologists’ study healthy people( to determine the difference between those who get the disease and those who are spared).
* epidemiologists study exposed people
* epidemiologists’ study non-exposed people (to determine the effect of the exposure

# Uses of Epidemiology

* to determine, describe, and report on the natural course of disease, disability, injury, and death.
* to help in the planning and development of health services and programs
* to provide administrative and planning data to study the cause (or etiology) of disease(s), or conditions, disorders, disabilities, etc.
* to determine the primary agent responsible or ascertain causative factors
* to determine the characteristics of the agent or causative factors
* to determine the mode of transmission
* to determine contributing factors
* to identify and determine geographic patterns

# Purpose of Epidemiology

* to provide a basis for developing disease control and prevention measures for groups at risk
* this translates into developing measures to prevent or control disease.

## Two Broad Types of Epidemiology:

* 1. descriptive epidemiology: examining the distribution of disease in a population, and observing the basic features of its distribution.

## The 5W's of descriptive epidemiology

* + - What = health issue of concern
    - Who = person
    - Where = place
    - When = time
    - Why/how = causes, risk factors, modes of transmission
  1. analytic epidemiology: investigating a hypothesis about the cause of disease by studying how exposures relate to disease.

# Role of a nurse in epidemiology

## can be explained in 4 aspects

1. Preventive role
2. Promotive role
3. Curative role
4. Rehabilitative role

## Role in Prevention

They have an active role in the prevention and control of communicable diseases which include:

* Identify sources of infection and methods of spread of infection.
* Health education of people in general.
* Having an important role in the prevention and control of chronic and noninfectious problems, such as cardiovascular conditions, accident, cancer, etc.
* Notification of certain diseases like measles, diphtheria, tetanus, etc. to health authority.
* Teach and supervise other workers in surveillance activities.

## Role in Promotion of Health

* Using knowledge of epidemiology, the community health nurses can set priorities for health programs according to the immediate health needs.
* Using knowledge of epidemiology, they establish the health resources more effectively, by giving more emphasis to urgent health problems needing attention.

## Curative Role

* The nurses may participate as them members, especially when it is large scale investigation, e.g. occurrence of any epidemic.
* They may participate in data collection, data analysis, planning, implementation and evaluation.
* They may early diagnosis and treatment.
* They trace the contacts and keep them under surveillance.
* They identify sources of infection and methods of spread of infection.

## Role in Rehabilitation

* They can help people in the restoration of family and social life.
* They can also play a role in psychological rehabilitation by helping in restoring personal dignity and confidence of a person.

# Factors associated Unequal distribution of disease

1. **Ethnicity**: Population groups also differ genetically, so that some diseases are more prevalent in certain ethnic groups. This includes conditions such as sickle cell disease.
2. **Gender**: Males are at higher risk of dying from certain health conditions. Females are at higher risk for other health conditions.
3. **Age**: Young children and old people / Infant mortality is regarded as a primary indicator of health care.
4. **Region**: Rural people generally have poorer health than urban people. In the cities, slum dwellers have poorer health than non-slum dwellers.
5. **Education**: Better educated people tend to have better health
6. **Illegal workers**: They are at higher risk of developing occupational-related diseases
7. **Financial barriers** e.g. unable to pay, cannot afford to take time off from work to see the doctor
8. **Cultural barriers** A person’s “social class” position strongly linked to his or her health status.

# Classification of diseases:

**Acute**: Is typically characterized by severe symptoms of short duration (otitis media, appendicitis)

**Chronic:** lasts for an extended period usually 6 months or longer and often for the person's life. (DM, MI, HT).

# Etiology of diseases:

1- Biological agents: viruses, bacteria, fungi etc. 2-Physical agents: heat, cold, humidity etc.

3-Genetically transmitted disease. 4-Stress.