

## CHAPTER – 2 Social Pharmacy

### Topic: DEMOGRAPHY

#### 2.1

#### INTRODUCTION

Demography is the “scientific study of human population in which includes study of changes in population size, composition and its distribution”.

“Demo” means “the people” and “graphy” means “measurement”.

In the demographic studies we will discussed about the population size, growth (births, deaths, and migration), composition, and structure as well as the geographical distribution of the human population. It is also called rational/quantitative study about the women, men and different age groups.

The elements of demography

- Size: increase or decrease
- Composition: sex and age group
- Distribution: territory

#### 2.2

#### IMPORTANCE OF DEMOGRAPHY

1. Health status of a community depends upon the dynamic relationship between number of people, their composition & distribution
2. Planning of health services can be guided by demographic variables, for example:
  - a. How many health units do we need?
  - b. How to distribute them in the community in order to be accessible to the target population?
  - c. What type of manpower is needed?

Due to involvement of demographic study we will control the population growth by adding any modulus.

3. By the demography we will define the health status of any population or community and provided the regular health services.
4. After demographic study, we can fulfill the nutritional supplement, regular medicine and also fulfill the population needs.
5. Demographic studies, also improve the education level of any nation or state by providing the usable/accessory study materials and equipments.

**Biggest source of data on:**

- Demography
- Economic Activity
- Literacy & Education
- Housing & Household
- Urbanization
- Fertility and Mortality
- Scheduled Castes and Scheduled Tribes
- Language, Religion & Migration

**2.3****COMMON SOURCES & INDICATORS OF DEMOGRAPHY**

1. **Birth rate**— Birth rate is the statistic or rational expression about the, number of live births in a given area during a given time per 1000 population.
2. **Death rate**— Death rate is the statistic or rational expression about the, number of deaths in a given area during a given time per 1000.

**NOTE--** The rate of natural increase or the growth rate of population refers to the difference between the birth rate and the death rate. When this difference is zero then we say that the population has stabilized or has reached the replacement level. Sometimes, societies can experience a negative growth rate – that is, their fertility levels are below the replacement rate.

3. **Migration rate**—Due to the migration of people, it indicates the demographical changes in the population and affect the rational presentation. It is effect by two ways.
    - a) **Emigration**—Emigration is the process of relocation, in which people replace our residential place by another place.
    - b) **Immigration**—Immigration is also the process of relocation, in which people comes from their residential area and live another developed or suitable area.
  4. **Fertility rate**— The fertility rate refers to the number of live per births per 1000 women in the child bearing age group, usually taken to be 15 to 49 years. It also refers as, total number of live births that a hypothetical woman would have if she lived through the reproductive age group and had the average number of babies in each segment of this age group as determined by the age specific fertility rates for that area.
  5. **Infant mortality rate**— Number of death of babies before the age of one year per 1000 live births.
  6. **Maternal mortality rate**—Number of women who die in child birth per 1, 00,000 live birth
- NOTE--** High rates of infant and maternal mortality are an unambiguous indicator of backwardness and poverty, development is accompanied by sharp falls in these rates as medical facilities and levels of education, awareness and prosperity increase.
7. **Sex ratio**— Sex ratio refers to the number of females per 1000 males in a given area at a

specified time period.

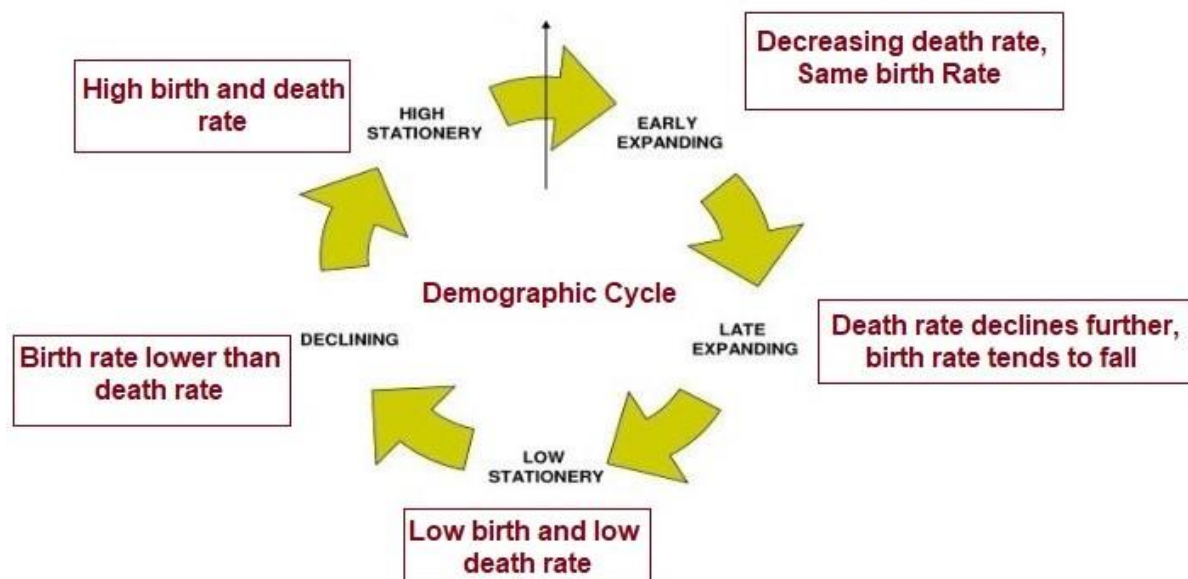
8. **Age** – Age structure of the population refers to the proportion of persons in different age groups relative to the total population.

**NOTE**—The dependency ratio is measure comparing the portion of a population which is composed of dependents with the portion that is in the working age group, generally defined as 15 to 64 years. The dependency ratio is equal to the population below 15 or above 64, divided by population in the 15-64 age group. This is usually expressed as a percentage.

## 2.4

### DEMOGRAPHIC CYCLE

1. **High stationary (first stage)**—This stage is characterized by; high birth rate and high death rate no any change in size of population.
2. **Early expanding (second stage)** — This stage is characterized by; death rate begins to decline and birth rate no change initial increase in population.
3. **Late expanding (third stage)** — This stage is characterized by; birth rate begins to decline while the death rate still decreases. Continue increase in population.
4. **Low stationary (fourth stage)**— This stage is characterized by, low birth rate and low death rate stability in population.
5. **Declining (fifth stage)** — This stage is characterized by; birth rate is lower than the death rate. Decrease in population.



## 2.5

### THEORIES ON DEMOGRAPHY

- The Malthusian theory of population growth (1798) Scientist—Thomas Robert Malthus (1766 – 1834)
- The theory of Demography transition.