

MR.RATHIDEVI

PROFESSOR

ICON

1) Define descriptive epidemiology?

* Descriptive epidemiology is the first phase of epidemiology investigation.

* These studies are concerned with the observing the distribution of disease or health related characteristics in human population.

2) Define Epidemic?

(Epi=upon,demos=people

* The unusual occurrence in a community or region of disease, specific health related behavior (eg: Smoking)or other health related events (eg: Traffic accident) clearly in excess of "unexpected occurrence".

3) Define Endemic?

En=in,demos=people

*The constant presence of disease within a geographical area or the usual prevalence of a given diseases in a particular area

4) Define Pandemic?

Pan=all,demos=people

An epidemic occurring over a very wide area,crossing international boundaries and usually affecting a large number of people.

eg:AIDS,Influenza,Corona

5)Define Hypothesis?

* On the basis of time, place and person distribution or the agent, host, environment modes formulate hypothesis, to explain the epidemic in terms of

a) Possible source

b) causative agent

c) Possible modes of spread

d)environmental factor.

6) Define Case control Studies ?

*Case control studies are basically comparison studies.

* Case and control must be comparable with respect to know "confounding factor" such as age, sex, occupation,and social status etc.

7) Define Cohort study?

*Cohort study is another type of analytical study which is usually undertaken to obtain additional evidence to refute or support the existence of an association between suspected cause and disease.

* Cohort study is know by a variety of names

*Prospective study

*Longitudinal study

*Incidence study

*Forward -looking study.

8) Define uses of descriptive epidemiology?

* Provide data.

* Provide clues to etiology.

* Provide background for planning, organizing and evaluating, preventive and curative services.

* Contribute to research.

9) List out advantages and disadvantages of case control studies?

ADVANTAGES:

* Relatively easy to carry out.

*Rapid and inexpensive (Compared with cohort studies).

*Require comparatively few subjects.

*Ethical problems minimal.

DISADVANTAGES:

*Selection of an appropriate control group may be difficult.

*We cannot measure incidence, and can only estimate the relatives risk.

*Do not distinguish between cause and associated factors.

* Another major concern is the representative of cases and controls.

10) Write down the elements of cohorts study?

*Selection of study subjects.

*Observing data on exposure.

* Selection of comparison groups.

*Follow and

* Analysis.

1. Difference between rate, ratio, proportion

Rate: A rate measures the occurrence of some particular events (development of disease or occurrence of death) in a defined population during a given time period.

Death rate = $\frac{\text{number of deaths in one year}}{\text{Mid year population}} \times 1000$

Mid year population

Ratio: It is the measure of disease frequency. It expresses a relation in size between two random quantities.

Proportion : A proportion is a ratio which indicates the relation in magnitude of a part of the whole. A proportion is usually expressed as percentage.

2. Difference between Incidence and prevalence

Incidence : Incidence is defined as the number of NEW cases occurring in a defined population during a specific period of time.

$$\text{Incidence} = \frac{\text{number of new cases specific disease during a given time period}}{\text{Population at risk during that period}} \times 1000$$

Prevalence: Disease prevalence refers specifically to all current cases (old&new) existing at a given point in time or over a period of time in a given population.

$$\frac{\text{No.of all current cases of a specified disease existing at given point in time}}{\text{Estimated population at same point in time}} \times 100$$

3. Difference between Mortality and Morbidity

Mortality : A measure of the frequency of occurrence of death in a defined population during a specified interval of time.

Morbidity: Any departure subjective or objective from a state of physiological or psychological well being.