



Al-Mustaqbal University / Nursing College
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Epidemiology



Lecture 7

Epidemiologic studies

By

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Types of Epidemiologic studies

Epidemiologic studies are of three general types:

1. Descriptive
2. Analytic
3. experimental.

Descriptive

is the study of the distribution of a given health state in a specified population in terms of person, place, and time.

The person :

reflects the characteristics of people who develop the condition, such as age, gender, race and ethnicity, economic status.

For example, who tends to develop arthritis and who has the most severe consequences of the disease (person)?



- **Place :**

include where the condition tends to occur.

For example, Does arthritis occur more frequently in some parts of the country than others?



- **Time** :

reflects when the condition occurs.

- For example, is arthritis diagnosed more frequently in certain seasons than others?
- Is the incidence of arthritis increasing or decreasing over time? (time)

Types of descriptive studies

Types of descriptive studies include

- surveys
- Cross-sectional studies
- Case reports
- Case series

surveys

- Aimed at determining the **frequency** of occurrence of a condition in the population.
- Provide information about the extent of exposure of the population to risk factors involved in a given condition.

Cross-sectional study

Examines the extent of a health condition and exposure to its contributing factors in a given population at a given point in time.

In this study the measurements of exposure and effect are made at the same time .

case report

provides in-depth information about a single instance of the condition.

for example myocardial infarction (MI) in **very young person** without ECG findings is unusual presentation of MI.


Case series

is an examination of several case reports to determine common features.

for example Vaginal cancer is very rare in young females if 10 cases were reported and studied

Descriptive epidemiology is useful for several purposes.

- 1. evaluating trends in the occurrence of a condition within a given population and comparing occurrences between populations.
- 2. provides a basis for planning health services and allocating resources.

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- 3. descriptive epidemiology identifies problems for analytic epidemiologic investigations.
 - 4. Descriptive studies may provide causal hypotheses that can be tested in other types of epidemiologic studies.

Big Thanks

