

# A descriptive study

This article has been translated from WikiSkripta; the **formatting** needs to be checked.

**Descriptive studies** are observational studies, they describe the *distribution of the disease in the population* (according to characteristics person, place and time) and compare their occurrence in different geographical territories, in of different races, nations, ethnicities and social groups, in different time periods.

- They are a source of hypotheses, **indicating** to a possible causal (causal) **relationship** between various factors and the development of disease.
- These are observational studies that collect, sort and evaluate data on disease and mortality for a given disease. Of all the characteristics in this discipline, age is the variable that is most important and must be taken into account as much as possible.
- The goal of descriptive characteristics in medicine is to **show the relationship and connection** between living conditions, disease and death and the consequences caused by the above variable characteristics.
- The causal relationship between mortality, environmental and lifestyle factors, provides epidemiologists with the opportunity to develop **prevention and control programs** to suppress a given disease.
- When causality is understood, there will be places where it is possible to **intervene** so that the given phenomenon in the population decreases and the health level of the population increases.
- Mostly in them we monitor incidence, prevalence, mortality from a given disease in population groups in relation to various characteristics of a person, place and time.
- Mausner and Bahn propose to include in descriptive epidemiology as basic variables, in addition to age, place and time as basic concepts used to describe events and activities that surround us or can cause disease outbreaks.<sup>[1]</sup>

## Purposes and Uses

1. They provide information about which persons, when and where the disease is most likely to affect.
  2. They help in health care planning, i.e. for preventive medicine and public health.
  3. They can provide a key to elucidating etiology, they are the basis for hypothesis formulation, by which they seek to explain new facts.
- Various materials are used: demographic and statistical yearbooks, reports of infectious diseases, medical records, patient registers, autopsy reports, health insurance records, data on the consumption of medicines, on the health services provided, on the consumption and supply of food, water supply, data on the consumption of cigarettes, migration of the population.
  - Most of these data are routinely *collected and well available*, making these studies less expensive and less time-consuming.
  - In this study, the epidemiologist observes the characteristic features of the person, place and time - i.e. who got sick, where and when.

## Examples of descriptive studies

### Correlation study

- Research is done at the population level:
  - comparison of different groups at the same time,
  - comparison of the same groups at different times,
- In correlation studies, the occurrence of a disease (phenomenon) is compared in relation to various factors (age, sex, time, consumption of certain products, use of medicines, etc.),
- The **measure of association** between predicted risk and disease is the correlation coefficient, whose value ranges from +1 to -1.

### Case reports and series of case reports

- They describe medically unusual individual cases or a series of cases with a similar presentation,
- They can present the first key findings in the identification of new diseases or adverse consequences of exposure.

## Links

### Related Articles

- Methodology in epidemiology
- Analytical Studies

### References

1. ↑ Timmreck, Thomas. *An Introduction to Epidemiology*. 3rd edition. Sudbury, Massachusetts, USA: Jones and Bartlett Publishers, 2002. 505 pp. pp. 205-210. ISBN 0-7637-0060-6 .

## References

- TIMMRECK, Thomas. *An Introduction to Epidemiology*. 3rd edition. Sudbury, Massachusetts, USA : Jones and Bartlett Publishers, 2002. 505 pp. ISBN 0-7637-0060-6 .
  - BENCKO, Vladimír, et al. *Epidemiology: teaching texts for students of the 1st Faculty of Medicine, UK*. 1st edition. Prague: Karolinum, 2002. 168 pp. pp. 16-24. ISBN 80-246-0383-7 .
1. TIMMRECK, Thomas. *An Introduction to Epidemiology*. 3. edition. Sudbury, Massachusetts, USA : Jones and Bartlett Publishers, 2002. 505 pp. pp. 205-210. ISBN 0-7637-0060-6.