

## STUDY DESIGN.

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## What can studies do?

**Descriptive:** Describe the situation.

**Analytical:** Explain the situation.

**Experimental:** Apply an intervention.

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## Study designs.

Type of Study	Descriptive	Analytical
Case study	Yes	No
Case series	Yes	No
Cross-sectional	Yes	Yes
Case-control	Yes	Yes
Cohort	Yes	Yes
Intervention trial	Yes	Yes
Randomised control trial	Yes	Yes

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## Study designs (version for printing).

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## Study designs.

- **Descriptive**

- cross-sectional, longitudinal.

- **Analytic**

- case-control study.

- cohort study.

- **Experimental**

- randomised controlled trial.

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Prevalence → Cross-sectional

Cause/  
Aetiology → Cross-sectional;  
Case-control;  
Cohort.

Prognosis → Cohort.

Harm → Case-control;  
Cohort.

Effectiveness → Controlled trial.

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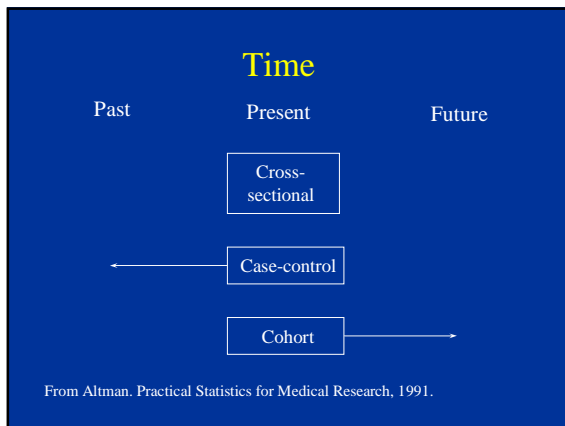
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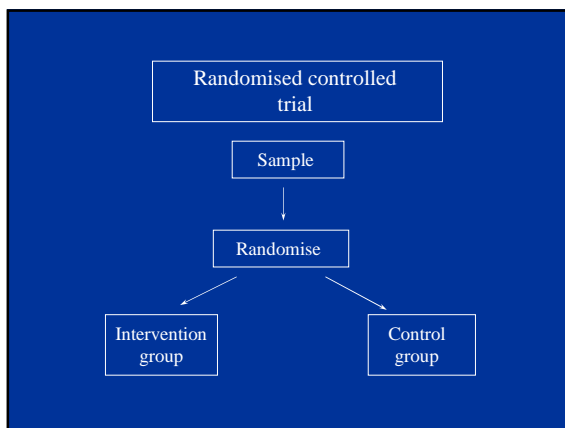
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## Objectives.

Usually a list of specific questions or statements which, if answered, will meet the aim(s).

Objectives should:

- ❖Meet the purpose of the study, i.e. fulfil the aim(s).
- ❖Be stated clearly.
- ❖Be measurable.
- ❖State the characteristics, or variables, to be measured.

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## Sampling.

### Who are these people?

- Target population
- Sampling frame
- Sampling method
- Study population
- Non-responders

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## Target population.

The group we want to make observations on.

Individual, non-overlapping units.

May be individuals, practices, medical records, e.g.

✧Patients with diabetes.

✧Carers.

✧General practices.

✧Medical records.

Must be representative of the population you are interested in.  
Also appropriate and practical.

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## Sampling.

Must be representative of the target population.



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### Sampling frame.

List of all units in the target population, e.g.

- ❖ All patients on a practice register.
- ❖ All patients admitted to a ward within a defined time period.
- ❖ All households within one postcode area.

Ensure it is as complete and unbiased as possible.

This takes *TIME!!*

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### Sampling method.

End result is your **study population**.

Commonly used techniques include:

- ❖ Random sampling.
- ❖ Systematic sampling.
- ❖ Cluster sampling.
- ❖ Stratified sampling.
- ❖ Snowball sampling.

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### Critical appraisal - what is it?

The process of assessing and interpreting evidence, by systematically considering its validity, results and relevance to your own work.

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