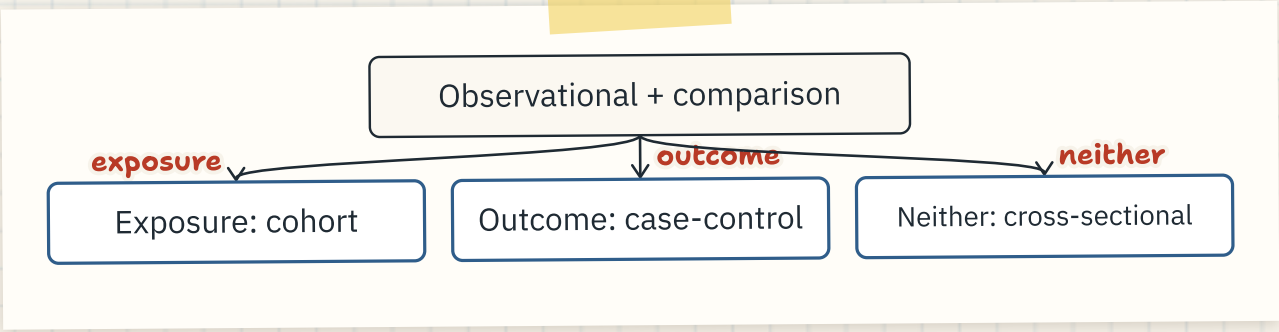
Study designs in 3 questions

Sort by assignment, comparison and selection



Step by step

1. Did the researchers assign the exposure?
2. Is there a comparison group?
3. Picked by exposure, outcome or neither?
4. Name the measure the design gives

Design	Picked by	Measure
Cross-sectional	Neither (one time point)	Prevalence
Case-control	Outcome	Odds ratio
Cohort	Exposure	Incidence, RR
RCT	Assigned by chance	Incidence, RR

Design, selection and measure

Rule of thumb

Rare outcome: case-control
Rare exposure: cohort
Retrospective = timing, not design

Exam traps

- Retrospective does not mean case-control.
- Only a trial randomises.
- A case series has no comparison group.

Study designs explained: case-control, cohort, cross-sectional and RCT

Video, written lesson, practice question and sources: medservatory.com/usmle-step-1/biostats-ethics/study-designs-case-control-cohort-cross-sectional-rct

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