

OCCUPATIONAL

EPIDEMIOLOGY

Ramin Mehrdad. MD. MPH. CIME.

Center for Research on Occupational Diseases

Tehran University of Medical Sciences

Epidemiology Uses

- **Surveillance**
- **Report to Employer**
- **Findings of Research Articles**
- **Scientific publications**
- **Personal Improvement**

Epidemiologic Studies

❖ *Observational*

Descriptive
Analytic

❖ *Interventional*

EPIDEMIOLOGIC STUDIES

➤ *Descriptive*

- Case report

- Case series

➤ *Analytic*

- Cross-sectional

- Case control

- Cohort

➤ *Interventional*

- Controlled trials

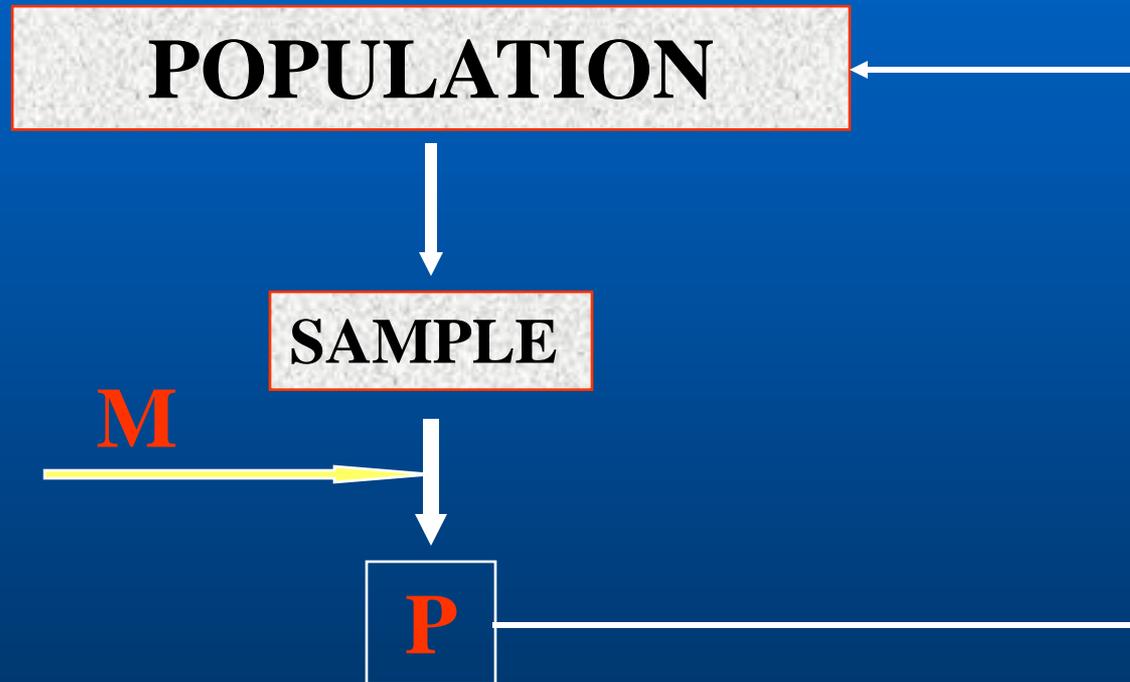
CASE REPORT

STUDY

CASE – SERIES

STUDY

CROSS SECTIONAL STUDY



CROSS SECTIONAL STUDY

1- Sampling

Method

Number

2- Measurement

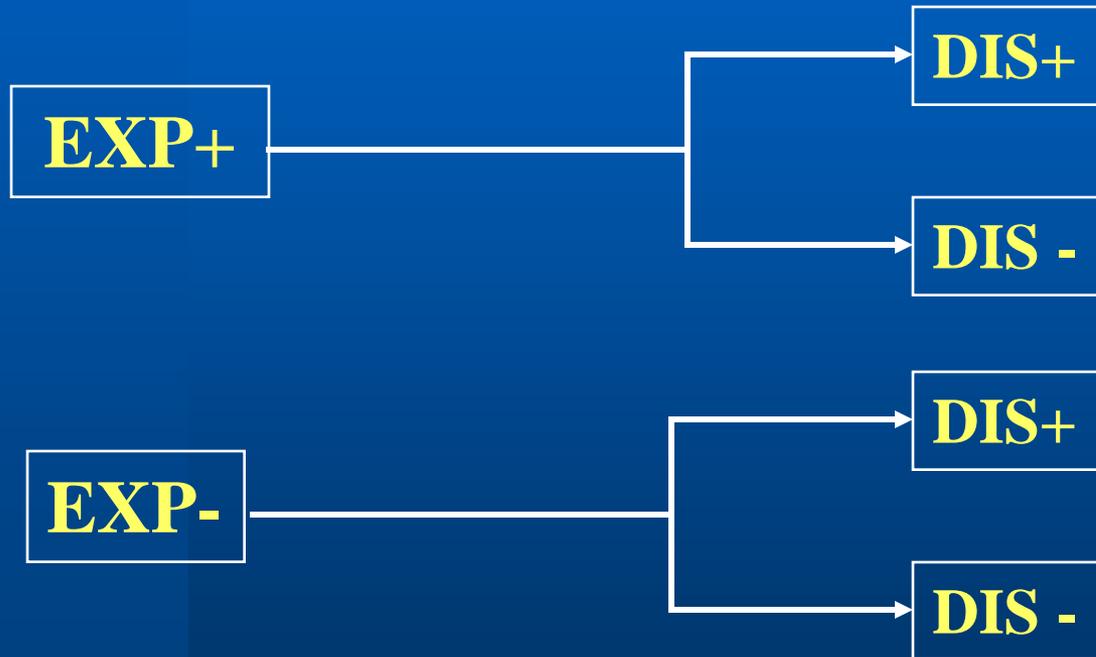
3-Prevalence

ANALYTIC STUDIES

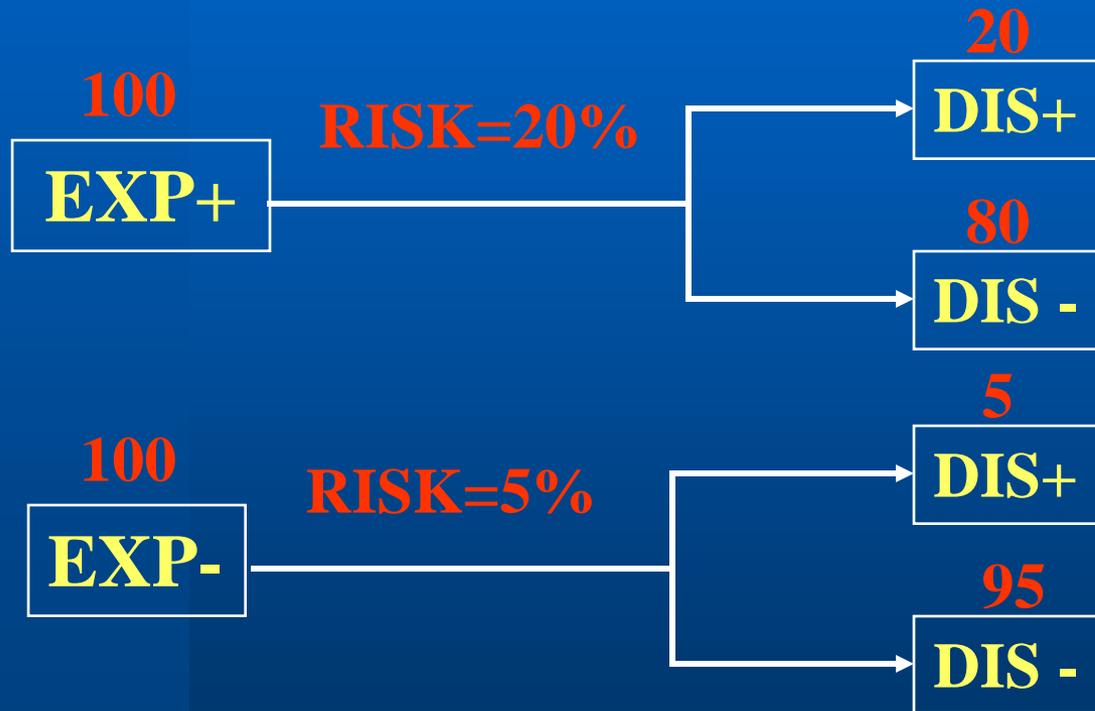


Association

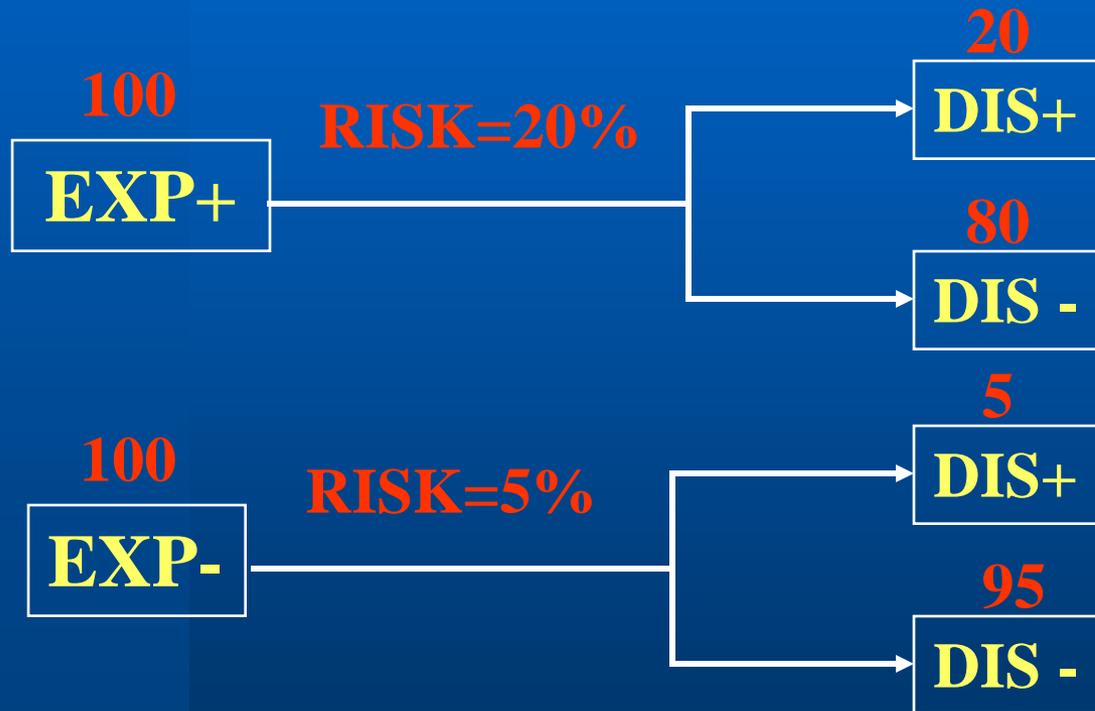
COHORT STUDY



COHORT STUDY

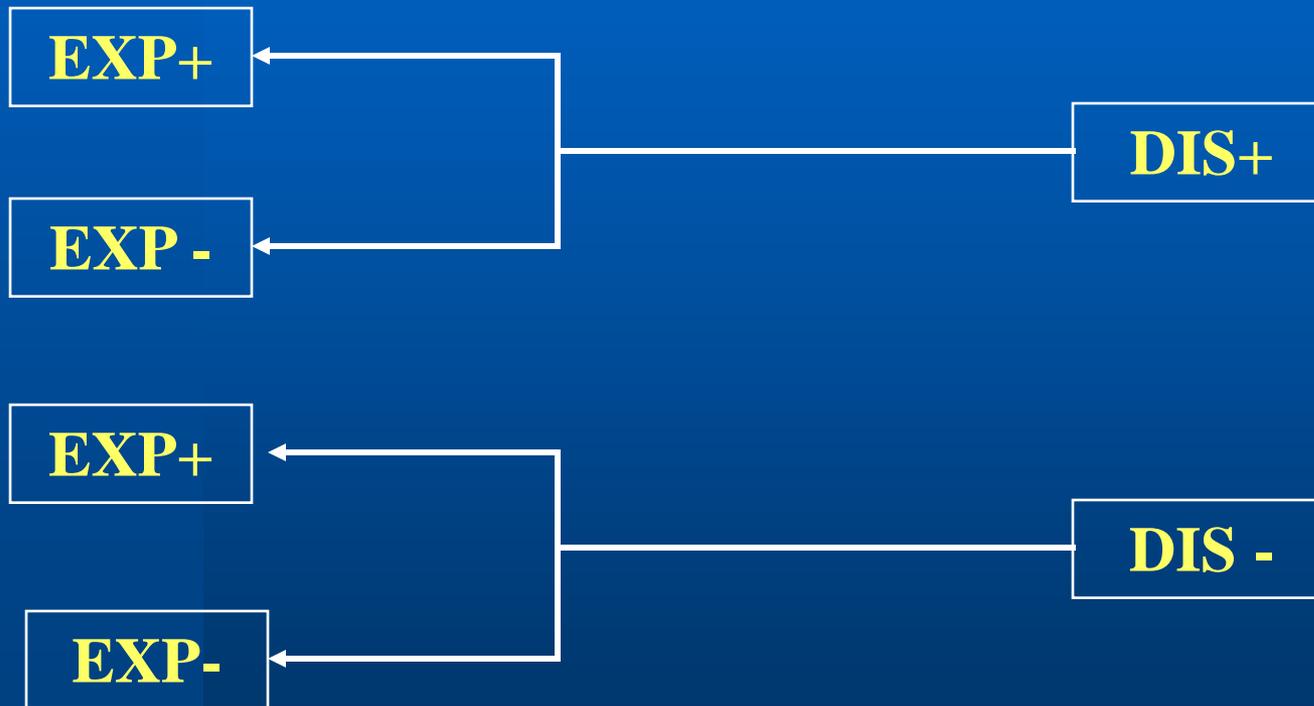


COHORT STUDY



$$\text{Relative Risk (RR)} = \frac{\text{Risk in Exp+ Group} = 20\%}{\text{Risk in Exp- Group} = 5\%} = 4$$

CASE – CONTROL STUDY



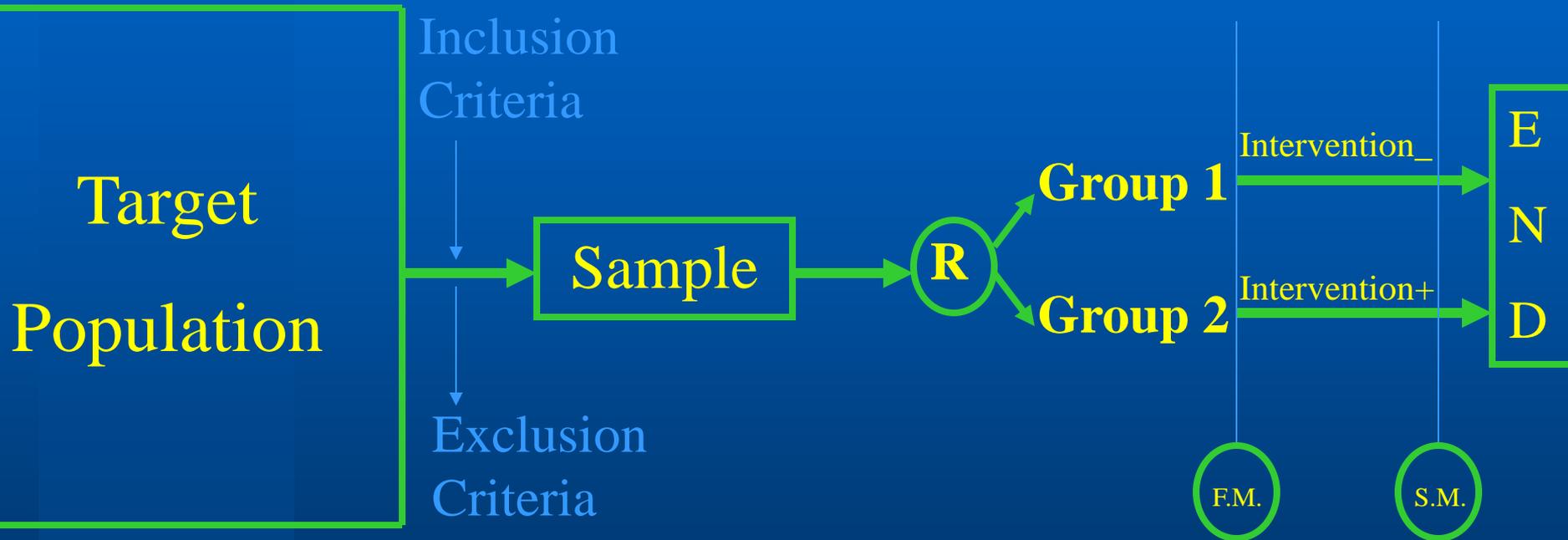
Odd's Ratio = 4

CLINICAL TRIAL

RANDOMIZED CONTROLLED TRIAL (RCT)

- ✓ **Ethical issues**
- ✓ **Randomization**
- ✓ **Control group**
- ✓ **Blindness**

Clinical Trial



Ethical Issues Randomization Control Blindness