**BIAS**

Selection bias

- Systematic error introduced during the selection of study participants (implementation and/or analysis phases).

Information bias

- Systematic error introduced by the collection of information that is erroneous from study participants (data collection phase).

**IMPACT**

Selection bias

- The study population is NOT representative of the target population.
- It impacts the study’s internal and external validity.

Information bias

- Can result in:
  - Misclassification bias
    - Differential
    - Non-differential

**FORMS/SOURCE**

Selection bias

- In RCTs and COHORT studies:
  - Inadequate concealment (RCT)
  - Self-selection (e.g., volunteer bias)
  - Eligibility criteria/membership bias
  - Loss to follow-up
  - Withdrawals
  - Non-response and missing data

- In CASE-CONTROL studies:
  - Inadequate control selection
  - Matching

Information bias

- Recall bias
- Interviewer bias
- Observer or surveillance bias
- Reporting bias

**PREVENTION**

- At design stage: retain study participants
- Sensitivity analysis

- Standardized data collection tools
- Blinding
- Validated instruments
- ‘Phantom’ control (for interviewer bias)
- Objective & multi source information
- Sensitivity analysis

---

Author: A. Zerbo
Sources: