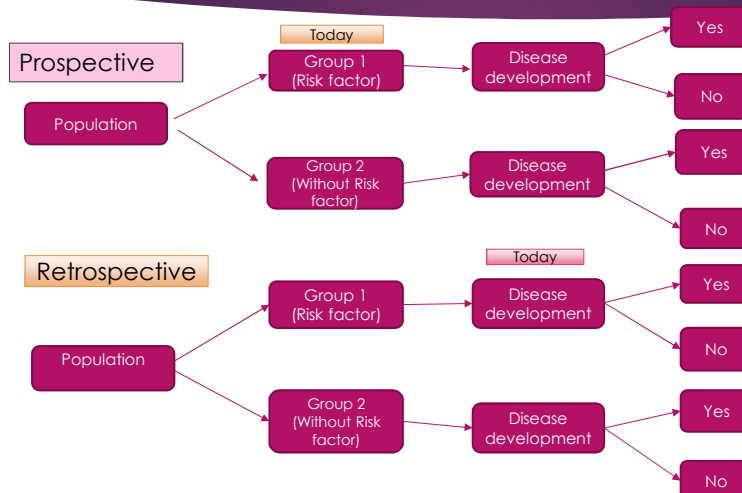


Cohort Study

- Cohort design is a type of non-experimental or observational study design.
- In a cohort study, the participants do not have the outcome of interest to begin with.
- They are selected based on the exposure status of the individual.
- They are then followed over time to evaluate for the occurrence of the outcome of interest.
- Cohort study is usually conducted in medical science.
- It can be conducted in two ways:
 - Prospective cohort studies
 - Retrospective cohort studies

Cont.



Cont.

STUDYS IS OF TWO TYPES

Prospective

- A Group of people is chosen who do not have the outcome of interest (for example, myocardial infarction).
- The investigator then measures a variety of Variables that might be relevant to the Development of the condition

Retrospective

- These use data already collected for other purposes. The methodology is the same but the study is performed.
- Outcome is already developed

Cont.

Prospective

- ▶ Studies carried out from present time to future
- ▶ Can be tailored to collect specific exposure rate
- ▶ But long wait for events to occur
- ▶ Expensive
- ▶ Prone to high dropout rates

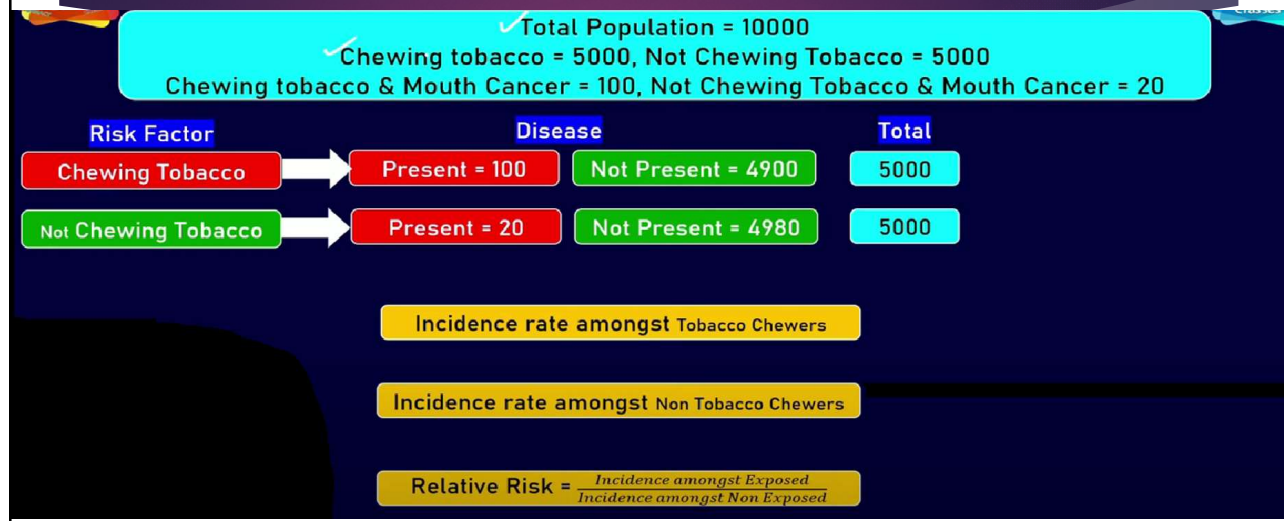
Retrospective

- Look at medical events from past to present
- Information is available immediately
- Difficulty in tracing subjects and doubt on quality of recorded information

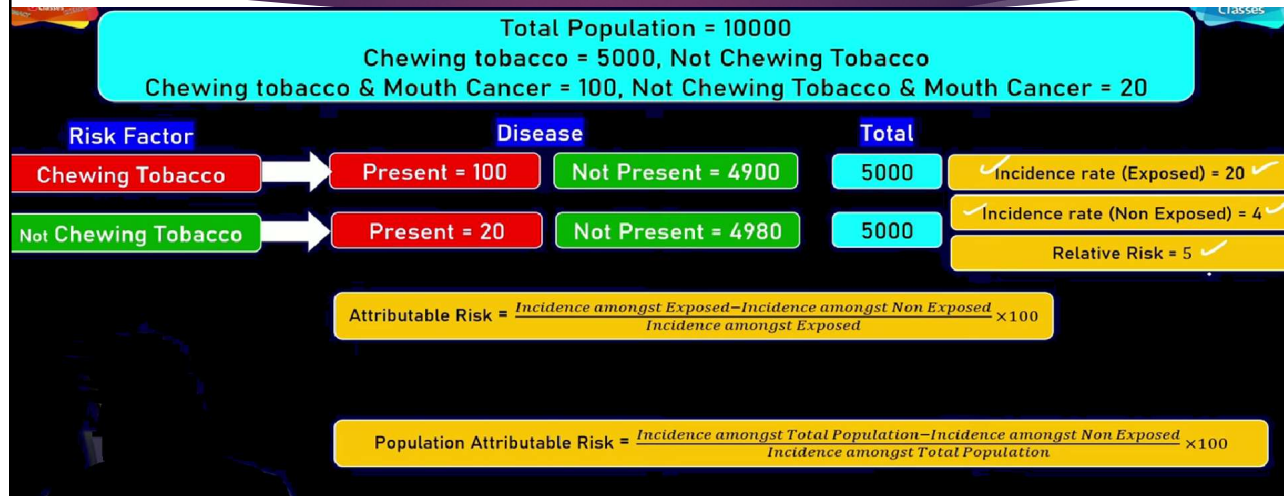
Difference between Prospective & Retrospective

Prospective	Retrospective
Planned in advance.	Based on current status.
Carried over a future period of time.	Already happened in the past.
Investigator visualize & design the study.	Exposure and outcome both are determined retrospectively.
Follow up is usually conducted by <ul style="list-style-type: none"> - eMail Questionnaires - Telephonic Interviews - Video Call - In Person Interview - Physical Examination - Laboratory test 	Follow up not required.
More Time taking and More expensive	Less Time taking and less expensive

Cont.



Cont.



Advantages

- ▶ Multifactor can be studied simultaneously.
- Incidence rate
- Relative risk
- Attributable risk & Population attributable risk

Disadvantages

- ▶ Time consuming
- ▶ Expensive
- ▶ Problematic in rare disease
- ▶ Ethical problem