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# ASSIGNMENT: TEACHING METHODOLOGY AND

# COMMUNITY MEDICINE

# SEMESTER: DPT 6TH

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## QUESTION : 1

## ANSWER:

**CASE CONTROL STUDY**

.Two groups of individuals are compared, one who have been diagnosed as diseased with those who are free from disease.

.The group having disease is called Cases while the disease-free group is called control.

.The presence of possible cause is compared between cases and control.

.The direction of the study is from effect to the possible cause.

.This study is Retrospective because the investigator is looking backwards.

## 

**CASE CONTROL STUDY STEPS**

1. Definition of cases.
2. Selection of cases.
3. Selection of control.
4. Measurement of exposure status.
5. Analysis.
6. Interpretation and conclusion.

**EXAMPLE:**

Lung cancer patients.

**Selection of cases and control**

**CASES:**

.Preferably new cases or incident cases.

.Prevalent cases ( cases already present).

.Random selection.

**CONTROL:**

.Control must be ideally matched with the cases by age, sex and other characteristics except that the controls must not be suffering from disease.

**ADVANTAGES OF CASE CONTROL STUDY:**

.Relatively quick.

.Relatively cheap.

.Can investigate a wide range of risk factor especially for rare diseases.

**LIMITATION OF CASE CONTROL STUDY:**

.Prone to selection bias (favouritism)

.Prone to responder bias.

.Cannot estimate disease incidence.

## QUESTION: 2

## ANSWER:

COHORT STUDY

Cohort means group of people who share a common experience within a defined period of time.

Cohort must be free of disease at the start of the study.

A cohort is selected from the population at risk.

It is divided into two groups for comparison.

One group is exposed to the risk factor.

Then these two groups are studied prospectively over a defined period of time.

Study direction is from cause to the effect.

**STEPS OF COHORT STUDY:**

1 Selection of exposed population.

2 Selection of comparison group.

3 Measuring of exposure

4 Follow- up of both groups

5 Assessment of outcomes (EFFECTS)

6 Analysis.

**EXAMPLE:**

Smooking cause lung cancer.

**TYPES OF COHORT STUDIES:**

**Prospective:**

Start with exposed and unexposed groups, wait for the outcome.

**Retrospective:**

Uses existing data collected in the past to identify the population and the exposure status ( exposed or not exposed groups)

Determines at present the development status of disease.

**SCOPE OF COHORT STUDY:**

It is suitable for the study of rare exposures.

Can asses multiple outcomes (effects) of a single exposure.

Can detmonstrate a temporal relationship between exposure and disease.

Dose-response relationship or (exposure-response relationship)

Allows direct measurement of incidence of disease in the exposed and non-exposed population.

**LIMITATIONS OF COHORT STUDY:**

If prospective, can be very expensive and time consuming.

If retrospective, requires the availability of existing records.

Attrition (reduction in N o. of ppl) problem: migration, get tired of frequent questioning and check ups.

Ethical problems, especially when get a disease.

## THANK YOU SIR……