NAME: Nayab Zahid ID: 13918 From: Dpt Semester: 6th Answer:(1) (A)Epidemiology:

Epidemiology is the study of determinants, distribution, Health related states and events of medical science. A branch of medicine which deals with the control of disease, relating health care, condition of disease and pathogen.

(1)Determinants of epidemiology:

Determinants include causes;

- Risk factors.
- Do not include public health.
- Specific disease agents.
- Environmental factors.
- Distribution of a disease.

(2)Distribution of epidemiology:

Epidemiology is the study of distribution. Distribution covers time (when), place

(where), and person (who).

Distribution from person, place and time.

Epidemiology is the study of distribution of diseases.

Epidemiology describes health events.

(3)Health related states and events:

Refers to;

- Causes of death.
- Health related behaviors.
- Reaction to prevention programs.
- Utilization.
- Provision.

Health related states and events is not just disease in specific population.

For example;

- Neighborhood.
- School.
- City.
- Country.
- Global etc

(B)(1) Primary data:

The data in which participants are connected in study means collection of data, collected directly.

• Participant are directly achieve a data collection.

For example:

- Surveys.
- Focus group discussions.

(2) Secondary data:

Direct collection of data.

For example;

- Internet research.
- Newspaper articles.
- Company reports.

Answer(2):

CROSS SECTIONAL STUDIES:

Cross sectional studies are used to assess the burden of disease. A cross -sectional survey used to assess the burden of a particular disease in a defined population. Early cross sectional studies:

Early cross sectional studies describe lower back bone mineral density by single or dual photon absorptiometry. One cross sectional study used to conventional DXA and a lower lumbar spine around age 50-51 years. It means the age at menopause is (12). These cross sectional studies cannot determine the time during the transition when bone loss occur. Observational study:

The cross sectional study is an observational study. One specific point time in a same population. There is no prospective. Both the RR and OR can be calculated to describe the association between the exposure and outcome. The incidence and prevalence . Important descriptive measures can also be calculated from a cross-sectional study.

Cross sectional studies are useful for characterizing the prevalence of a condition. Measurements are made at a specific time in a specific time. There is no longitudinal component of the investigation.

For example: All the children in the emergency room during a certain month in their blood drawn pre to determine to antibodies indicating a particular virus. This study can be easy to conduct. CDH;

Cross sectional studies certain data depending on the time and method of data collection. Example:Hidden mortality of CDH.

Cross sectional study may not certain data on the time and method of data collection.

Cross sectional studies have other limitations.

Useful for characterizing the prevalence of a condition.

Inability to demonstrate a temporal relationship.

These studies provide data to justify further epidemiologic investigation.

Answer(3):

- Case control study: Cohort study:
- 1. Retrospective. 1. Prospective
- 2. Quick results. 2.Long waiting time
- 3. Rate diseases. 3.Common diseases
- 4. Not appropriate for 4. Appropriate for rare
- rare exposures. exposures.
- 5. Study only one disease.5. Study more than

one.

6. Study population 6. Study population

relatively small.	relatively large.
7. Cheap.	7. Costly
8. Less time and less	8. More time and more
expensive.	expensive
9. Small sample size.	9. Large sample size
10.Multiple exposures.	10. Multiple outcomes
Example of case control study:	

1. Fictitious:

A suspicion that zinc oxide. The

white non absorbent sunscreen traditionally by lifeguards is more effective at preventing sunburns that lead to skin cancer than absorbent sunscreen lotions. A case control study was conducted to investigate if exposure to zinc oxide is a more effective skin cancer prevention measure. The study involved comparing a group of former lifeguards that had developed cancer on their cheeks and noses to a group of lifeguards without this type of cancer control and absorbent sunscreen lotions.

Example of cohort study:

2. Epidemiological Question.

Epidemiological question

that can be answered using a cohort study is whether exposure to X-ray, smoking associates with outcomes Y say, lung cancer. Such studies follow two groups of patients for a period of time and outcome measure between the two groups.