

Question bank

Epidemiology

2nd year of Technical

Institute of Nursing

2019- 2020

1- Outbreak investigation

Definition of Public health surveillance:

• It is an ongoing systematic collection, analysis, interpretation, and dissemination of health data.

Put T or F

Items	T & F
1- Epidemic curve is consider tools of out break investigation	Т
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2- Investigation of an epidemic is the responsibility of education departments	F
3- Communicate findings should be perform during out break	F
investigation	

MCQ

1- Importance of outbreak investigation:

- The need to institute control and prevention measures.
- The opportunity of research and training.
- Health programs considerations.
- All of above

2- outbreak investigation interpretation tools:

• Spot map

- Growth chart
- Population sheet
- Case study

List:

Types of surveillance:

Epidemiologic surveillance

Demographic surveillance

Nutritional surveillance

Surveillance of growth and development

Surveillance of drinking water quality

Steps of out break

- Prepare for field work
- Establish the existence of an outbreak
- Verify the diagnosis
- Define and identify cases.
- Establish a case definition
- Identify and count cases
- Perform descriptive epidemiology
- Develop hypotheses
- Evaluate hypotheses

- Confirmation of hypotheses
- Implement control and prevention measures
- Communicate findings

2- Levels of prevention

Define the following:

Prevention: Are actions aimed at eradicating, eliminating or minimizing the impact of disease and disability.

<u>Health promotion:</u> it is aiming at improving and maintaining positive health status

<u>Disability limitation:</u> it is adequate treatment to arrest the disease process and to prevent further complications & sequelae.

<u>Tertiary level of prevention:</u> it is the measures that directly applied after an illness or disability condition has occurred

<u>Terminal care</u>: it is care for patient in the final stages of the disease and expected to die.

Put (T) or (F)

Items	F/T
1- Primordial prevention is those actions that inhibit the emergence and establishment of factors that are known to increase risk for disease	(T)
2- The main activities of quaternary level of prevention are screening and specific diagnostic procedures	(F)
3- Health of each individual is a static process	(F)

4-Secondary prevention is involving legislation and enforcement to ban or control the use of hazardous products	(F)
5-Daily, low-dose aspirins and/or diet programs to prevent further heart attacks or strokes is considered example of primary level of prevention	(F)
6- Activities such as suitably modified work so injured workers can return safely to their jobs is example of secondary prevention	(T)
7- Primary prevention is the detection and intervention into the cause, risk factors and precursors of disease	(T)
8- Instructions to wear bike helmet is example of secondary prevention	(F)
9- Specific protection aims to preventing the occurrence of disease by activities such as Immunization program	(T)
10-Primary prevention includes returning the client to highest level of function possible following the correction of health problems	(F)

III. MCQ

1	It	returning	the	client	to	highest	level	of	function
possible follov	wing t	he correcti	on of	health	pro	blems			

- a. Primary level
- b. Primordial

c. Tertiary level

- d. Secondary level
- 2- Which defined as actions that inhibit the emergence of risk factor which increased risk for disease?
 - A. Primary
 - B. Secondary
 - C. Intermediate
 - **D.** Primordial prevention
- 3- Which of these activities are considered to achieve health promotion?
 - A. Vaccination
 - B. Health education
 - C. Recreation
 - D. Prevention
- 4-Which of these activities take place after the onset of any health problems?
 - A. Primary
 - B. Secondary
 - C. Tertiary prevention
 - D. Primordial prevention
- 5- Isolation of a child with measles to prevent spread of infection belongs to what level of prevention?
 - A. Primary
 - B. Secondary
 - C. Intermediate

- D. Tertiary
- 6- Operation Timbang is done to identify members of the susceptible population who are malnourished; it is considered as what level of prevention?
 - A. Primary
 - **B. Secondary**
 - C. Intermediate
 - D. Tertiary
- 7- Scoliosis screening and pap smears are examples of what level of prevention?
 - A.Primary
 - **B. Secondary**
 - C. Intermediate
 - D. Tertiary
- 8- Tertiary prevention is needed in which stage of the natural history of disease?
 - A. Pre-pathogenesis
 - B. Pathogenesis
 - C. Prodromal

D. Terminal

9- Nurse Olivia is advising the doctor to prescribe a drug little sideeffects for the patient with cancer. This action of Olivia is considered as what level of prevention?

- A. Primary
- **B.** Quaternary
- C. Intermediate
- D. Tertiary
- 10- Immunization and water purification are examples of what level of prevention?

A. Primary

- B. Secondary
- C. Intermediate
- D. Tertiary
- 11- Talk about diet, health beliefs and cultural implications such as the use of alternative therapies to a client with controlled hypertension considered of what level of prevention?
 - A. Primary
 - **B. Secondary**
 - C. Intermediate
 - D. Tertiary
- 12. Which activities involve measures provided to specific individuals to prevent the onset of obesity?
 - 1. Secondary prevention
 - 2. Tertiary prevention
 - 3. Primordial prevention
 - 4. Primary prevention

- 13. When designing health education program for food makers in restaurants to use cooking oils once time, it is considered of which of the following?
 - 1. Quaternary prevention
 - 2. Primary prevention
 - 3. Primordial prevention
 - 4. Tertiary prevention
- 14. When designing health education program for food makers in restaurants to use cooking oils once time, it is referred to which level of prevention?
 - 1. Quaternary prevention
 - 2. Primary prevention
 - 3. Primordial prevention
 - 4. Tertiary prevention
- 15. Which of the following includes preventive activities aimed to return the client to highest level of function possible following the correction of health problems?
 - 1. Quaternary prevention
 - 2. Primary prevention
 - 3. Primordial prevention
 - 4. Tertiary prevention

16. Mr. A ask lifeguards to check swimmers as they get out of the river to look for signs of a rash that can then be treated right away, he is engaging in which level of prevention activities?

1. Primordial prevention

2. Secondary prevention

- 3. Tertiary prevention
- 4. Quaternary level

17. The nurse is providing health education about injury and poisoning prevention to a group of young mother's at a health fair. What type of prevention is the nurse conducting?

1. Primary prevention

- 2. Secondary prevention
- 3. Tertiary prevention
- 4. Limited prevention
- 18. A school nurse is teaching a group of seniors about selfexamination techniques for the breast and testicular cancer in their health class. What type of health care prevention is the school nurse teaching?

1. Primary

- 2. Secondary
- 3. Tertiary
 - 4. Limited

3- Measuring disease and health

I. Circle (T) if the statement is true or (F) if the statement is false:

N	Statement	True	
			False
1	Most of health determinate are inside the health sector.		F
2	Population at risk include People who are potentially susceptible to the diseases	T	
3	Endogenous agent arise from pollution of the environment and invade the body through inhalation, ingestion, or contact.		T
4	Tuberculosis is one of epidemic disease that is worldwide in distribution		F
5	Prevalence rate is often used instead of incidence during a disease outbreak in a narrowly-defined population over a short period of time.		F
6	Mortality rate is a measure of the frequency of occurrence of death in a defined population, during a specified time period	T	
7	Crude death rate is the number of deaths from all causes in all age groups and for only women during a given time and place per 1. 000 or 100. 00.		F
8	Age- Specific Death Rate isn't limited to a particular age group.		F
9	Life expectancy is the average number of years an	T	

individual of a given age is expected to live if current	
mortality rates continue	

II. Read the following statements and circle only one best answer:

- 1- Which the following include health determinants:
 - a- Social and economic factors
 - b- Social, economic, cultural and environmental factors
 - c- Cultural and environmental factors
 - d- Social, economic and environmental factors
- 2- Which the following refers to an aspect of personal habits or an environmental exposure, which increased probability of occurrence of a disease.
 - a- Risk factor
 - b- Population at risk
 - c- Ecology of disease
 - d- Health indicators
- 3- A disease occurrence that clearly exceeds normal frequency in community or region; its namely
 - a- Epidemic disease:
 - b-Endemic disease
 - c- Pandemic disease
 - d- Chronic disease

4-	•••••	represents the rate of occurrence of new cases
ari	sing i	n a given period in a specified population.
	a-	Period Prevalence rate
	b-	Attack rate
	c-	<u>Incidence rate</u>
	d-	Point Prevalence rate
		is the number of deaths among children under 1 ge reported during a given time period.
	a-	Neonatal Mortality rate
	b-	Postnatal Mortality rate
	c-	Maternal Mortality rate
	d-	Infant Mortality rate
		born to a woman throughout her child-bearing period.
	a-	General Fertility Rate
	b-	Age Specific Fertility Rates
	c-	Total fertility rate
	d-	Crude birth rate

III. Complete:

- **1. Health** It is a state of complete physical, mental and social wellbeing and not merely absence of disease.
- **2- A health indicator** is a variable that can be measured directly to reflect the state of health of people within a community

- **3- Ecology** is a triad of interacting factors related to host, agent, and environment
- **4- Epidemic disease:** it is a disease occurrence that clearly exceeds normal frequency in community or region.
- **5- Endemic disease:** It is the continuing presence of a disease or infectious agent in a given geographic area.
- **6-Pandemic disease:** An epidemic disease that is worldwide in distribution.
- 7-Attack rate: is often used instead of incidence during a disease outbreak in a narrowly-defined population over a short period of time.

Factors determine prevalence include:

- a. The severity of illness
- b. The duration of illness
- c. The number of new cases

List three Environmental factors that influence health of people:

- b. Physical factors
- c. Biological factors
- d. Socioeconomic factors
- e. Availability of health services.

The elements of Ecology of disease include:

- a- Host
- b- Agent
- c- Environment

4-Epidemiology (Types of studies)

- 1. Epidemiological studies can be classified as either observational or experimental. (T)
- 2. Ecological (or correlational) studies are useful for generating hypotheses.(T)
- 3. In a cross-sectional study the measurements of exposure and effect are made in different time (F)
- 4. Case-control studies provide a relatively simple way to investigate causes of diseases, especially rare diseases. (T)
- 5. Intervention or experimentation involves attempting to change a variable in one or more groups of people (T)
- 6. Case-control studies, also called follow-up or incidence studies (F)

5- Epidemiology

Definition of the epidemiology:

Epidemiology is the study of the distribution and determinants of healthrelated states or events in specified populations

Another definition epidemiology is the study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to control health problems

- Definition of the pattern?

Patterns: refers to the occurrence of health-related events by time, place and personal characteristics

- Definition of the frequency?

A complete summary of the frequencies of the values or categories of a variable

- <u>Definition of the Determinants?</u>

Any factor, whether event, characteristic, or other definable entity, that brings about change in a health condition, or in other defined characteristics.

Mention of factors affecting the occurrence of disease?

1- Genetic factors

Although some diseases are caused solely by genetic factors, most result from an interaction between genetic and environmental factors. Diabetes, for example, has both genetic and environmental components.

2-Environmental factors

We define environment broadly to include any biological, chemical, physical, psychological, economic or cultural factors that can affect health. Personal behaviors affect this interplay, and epidemiology is used to study their influence and the effects of preventive interventions through health promotion.

3- Both genetic and environmental factors

6- List the Uses of Epidemiology?

- 1-Population or community health assessment:
- I- Individual decisions
- II- Completing the clinical picture:
- III- Search for causes of diseases:
- IV- Evaluation of new interventions

7- Descript the sources of data in epidemiology?

- 1- Population Census (usually every 10 years).
- 2- Vital statistics (birth and death record).
- 3- Hospitals' records and reports.
- 4- Health surveys.
- 5- Public health surveillance

Choose the best answer:-

1-Source of the data in epidemiology

- a- Population or community health assessment:
- b- Individual decisions
- **c-** Completing the clinical picture
- **D- Population Census.**

2- Uses of the epidemiology?

a- Individual decisions

- b- Health surveys.
- C- Population Census.
- d-Public health surveillance.

3- A complete summary of the frequencies of the values or categories of a variable means :-

- a- Epidemiology
- **b- Frequency**
- c- Pattern
- d- Distribution
- 4- The study of the distribution and determinants of health-related states or events in specified populations.
 - a- Epidemiology
 - b- Frequency
 - c- Pattern
 - d- Distribution

Write true and false in these statements?

- 1-Epidemiology is the study of the distribution and determinants of health-related states or events in specified populations. **True**
- 2-Frequency A complete summary of the frequencies of the values or categories of a variable: include Incidence and prevalence rate. **True**
- 3- Distribution any factor, whether event, characteristic, or other definable entity, that brings about change in a health condition, or in other defined characteristics.

 False

4-Population: The total number of inhabitants of a given area or country. In sampling, the population may refer to the units, from which the sample is drawn, not necessarily the total population of people. **True**

Incidence rate A measure of the frequency with which an event, such as a new case of illness, occurs in a population over a period of time. **True**

Prevalence mean as a number or proportion of cases or events or conditions in a given population. **True**

Prevalence rate. The proportion of persons in a population who have a particular disease or attribute at a specified point in time or over a specified period of time. **True**

6-Chain of infection

Way that causative agent transmits to another host

- a) Portal of entry
- b) Portal of exit
- c) Reservoir
- d) Mode of transmission

Area where the causative agent can live:

- a) Mode of transmission
- b) Portal of exit
- c) Reservoir
- d) Portal of entry

Pathogen that causes disease:

- a) Portal of exit
- b) Susceptible host
- c) Infectious agent
- d) Portal of entry

Way for causative agent to escape the reservoir:

- a) Portal of exit
- b) Portal of entry
- c) Reservoir
- d) Causative agent

Person who get a disease because of weak defenses called......

- a) Causative agent
- b) Reservoir
- c) Susceptible host

How many links are in the chain of infection?

- a) Ten
- b) Five
- c) Twelve
- d) Six

What is the single most effective way to break the chain of infection?

- a) Hand washing
- b) Sterilization
- c) Cleaning surfaces
- d) Nutrition

What are these following structures examples of: respiratory tract, gastrointestinal tract, mucous membrane and skin lesion/ cuts /abrasions?

- a) Sources of entry/exit
- b) Vectors
- c) Infectious agent
- d) Mode of transmission

True and false questions:

Way for the causative agent to enter a new reservoir is called mode of transmission (F)

Person to person contact considers indirect mode of transmission (F).

Pathogen transmitted through air, soil, food or feces considers indirect contact (T).

The chain of infection include five links (F).

A pathogen is a small living organism that can cause disease (T).

Portal of entry for pathogen usually same as portal of exit (T)