

قائمة الاسئلة 08:07 12-04-2025

وبائيات -الرابع -مختبرات طبية-الطب والعلوم الصحية - الفترة الأولى- درجة الامتحان (70)

منصور التاج . عبدالسلام العاقل

- 1) The following statements are true for sufficient cause except
 - 1) a) The measles virus is necessary to cause measles in an unimmunized individual.
 - 2) b) For each sufficient cause, there is a necessary cause.
 - 3) + c) It is usually the only factor to cause the disease.
 - 4) d) The cause might not be necessary, but sufficient to cause the disease.
- 2) Precipitating factors in disease occurrence include only
 - 1) a) Repeated exposure
 - 2) b) Environmental conditions
 - 3) c) Hard work
 - 4) + d) Exposure to a specific disease agent
- 3) One of the following is not a characteristic of Hill's criteria
 - 1) a) Temporality.
 - 2) b) Dose response.
 - 3) c) Strength of association.
 - 4) + d) Temporal Rigidity.
- 4) In epidemic, one of the following statements is not correct
 - 1) a) The occurrence of rapid increase of cases of health events.
 - 2) b) The number of cases varies with the type of causative agent.
 - 3) c) Cases vary with the time and place of occurrence.
 - 4) + d) Cases do not vary with previous exposure
- 5) Propagated epidemic means:
 - 1) a) Point source
 - 2) + b) Person-to-person
 - 3) c) Continuous common source
 - 4) d) Intermittent common source
- 6) The presence of epidemic is not relating to
 - 1) a) Place of occurrence
 - 2) b) Previous exposure
 - 3) c) The agent.
 - 4) + d) The amount of money spent on the team of field investigation.
- 7) The global burden of communicable diseases does not include
 - 1) + a) Cancer prostate
 - 2) b) Diarrhoea diseases
 - 3) c) Acute respiratory infections
 - 4) d) HIV/AIDS
- 8) Epidemic curve is not
 - 1) a) Having a long-normal distribution
 - 2) b) Used to propose hypotheses on the nature of the disease.
 - 3) + c) Mostly evident in noninfectious disease.
 - 4) d) Graphical representation of cases against time of onset.
- 9) Causative agents do not include
 - 1) a) Chemical factors.
 - 2) b) Biological factors.
 - 3) + c) Demographic factors.
 - 4) d) Nutrient factors.



- 10) Our understanding of communicable disease does not include
 - 1) a) It is caused by specific infectious agents.
 - 2) + b) Can be transmitted indirectly from person to animal.
 - 3) c) Some pathogens cause disease through their toxic effect.
 - 4) d) Measles is both communicable and contagious diseases.
- 11) One of the following is not of the top five causes of death in low-income countries
 - 1) + a) Tuberculosis
 - 2) b) Coronary heart disease
 - 3) c) Lower Respiratory Infections
 - 4) d) HIV/AIDS
- 12) The first major cause of death in Low-income countries is:
 - 1) a) Lower Respiratory Infections
 - 2) b) HIV/AIDS
 - 3) c) Stroke and CVA diseases
 - 4) + d) Coronary heart disease
- 13) The limitations of Koch's Postulates do not include:
 - 1) a) Disease production may require cofactors.
 - 2) b) Viruses cannot be cultured.
 - 3) + c) Association cannot be established with viruses.
 - 4) d) Pathogenic viruses can be present without clinical disease.
- 14) The following statements are not true for endemics except:
 - 1) a) Propagated epidemic.
 - 2) + b) The constant presence of a disease.
 - 3) c) Continuous pandemic.
 - 4) d) Sudden occurrence of a disease in a community.
- 15) The purpose of assessing the community's health in epidemiology is:
 - 1) + a. To identify and analyse relevant sources of data by person, place, and time
 - 2) b. To develop new medical treatments for chronic diseases
 - 3) c. To increase the population size who are healthy and free of risk factors.
 - 4) d. To reduce healthcare costs
- 16) An endemic disease can turn into an epidemic through:
 - 1) a. Natural mutation of the causative pathogen
 - 2) + b. Introduction of a highly susceptible population into the endemic area
 - 3) c. Elimination of herd immunity through vaccination
 - 4) d. Implementation of strict infection control measures
- 17) The key characteristic of a "necessary and sufficient" cause?
 - 1) a. It is only necessary when other risk factors are absent
 - 2) b. It can cause disease but only in combination with other factors
 - 3) c. It must be present for the disease to occur, but other factors are needed
 - 4) + d. It alone can produce the disease without any other factors
- 18) Epidemic characterized by a gradual rise and fall in the number of cases is:
 - 1) a. Point source epidemic
 - 2) + b. Continuous common source epidemic
 - 3) c. Propagated epidemic
 - 4) d. Mixed epidemic
- 19) Propagated epidemic is:
 - 1) a. An epidemic that affects animals
 - 2) b. An epidemic resulting from a common source of exposure
 - 3) + c. An epidemic that spreads from person to person

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- 4) d. An epidemic that occurs in a specific location
- 20) The term "temporality" in the context of causality means:
 - 1) a. The effect must precede the cause
 - 2) b. The cause and effect occur simultaneously
 - 3) c. The cause and effect are unrelated
 - 4) + d. The cause must precede the effect
- 21) The primary focus of epidemiology is:
 - 1) a. Treatment of diseases
 - 2) + b. Study of disease distribution and determinants
 - 3) c. Development of new medications
 - 4) d. Genetic engineering
- 22) The father of modern epidemiology is:
 - 1) a. Louis Pasteur
 - 2) b. Robert Koch
 - 3) + c. John Snow
 - 4) d. Edward Jenner
- 23) One of the following is a common use of epidemiology in public health:
 - 1) a. Conducting genetic engineering
 - 2) b. Creating new pharmaceuticals
 - 3) + c. Identifying the cause of a disease outbreak
 - 4) d. Developing surgical techniques
- 24) The "epidemiological triad" is:
 - 1) + a. The interaction between host, agent, and environment in causing disease
 - 2) b. The three stages of disease prevention
 - 3) c. The stages of an outbreak investigation
 - 4) d. The methods used in a randomized trial
- 25) Common source patterns of epidemics do not include:
 - 1) + a. Propagated
 - 2) b. Point
 - 3) c. Continuous
 - 4) d. Intermittent
- 26) In a cohort study, participants are typically classified based on:
 - A) Their outcome status at the beginning of the study
 - 2) + B) Their exposure status at the beginning of the study
 - 3) C) Random assignment to treatment groups
 - 4) D) Their demographic characteristics only
- 27) Which of the following is a key advantage of cohort studies?
 - 1) A) They are less time-consuming than Case control studies.
 - 2) B) They are less effective than case-control studies on determine the risk factors.
 - 3) C) They have lower costs than cross-sectional studies.
 - 4) + D) They can measure multiple outcomes from a single exposure.
- When analyzing data from a cohort study, researchers often calculate which of the following to compare the risk of an outcome between exposed and unexposed groups?
 - 1) A) Odds ratio
 - 2) B) Prevalence ratio
 - 3) + C) Risk ratio (relative risk)
 - 4) D) None of above
- In a cohort study, if the risk of developing heart diseases in the smokers' group is 30% and the risk in none smokers' group is 10%, what is the risk ratio (RR)?



- 1) A) 0.5
- 2) B) 1.0
- 3) C) 2.0
- 4) + D) 3.0
- 30) Which of the following is a key advantage of cross-sectional studies?
 - 1) A) They can determine the temporal sequence of events.
 - 2) B) They are useful for studying rare diseases.
 - 3) + C) They are relatively quick and inexpensive to conduct.
 - 4) D) They provide information on incidence rates.
- 31) What is the main objective of a cross-sectional study?
 - 1) A) To track changes over time in a population
 - 2) + B) To assess the prevalence of a condition at a specific point in time
 - 3) C) To determine causality between an exposure and an outcome
 - 4) D) To evaluate the effectiveness of an intervention
- 32) Which of the following is a key advantage of case-control studies?
 - 1) A) They are less prone to bias than cohort studies.
 - 2) + B) They are time-efficient and can study rare diseases.
 - 3) C) They can establish causality more effectively than cohort studies.
 - 4) D) They require more funding than clinical trials.
- 33) One of the following is among the limitation of case-control studies?
 - 1) + A) They are prone to recall bias.
 - 2) B) They do not provide information on the risk factors for the disease.
 - 3) C) They are always more expensive than cohort studies.
 - 4) D) They require large sample sizes.
- Which of the following measures is commonly used to compare the relationship between cases and controls?
 - 1) A) Risk ratio
 - 2) B) Hazard ratio
 - 3) C) Prevalence ratio
 - 4) + D) Odds ratio
- 35) What is the main purpose of a randomized controlled trial (RCT)?
 - 1) A) To observe the natural history of a disease
 - 2) + B) To evaluate the effectiveness of an intervention
 - 3) C) To establish the prevalence of a condition
 - 4) D) To conduct a survey of patient satisfaction
- 36) In an randomized controlled trial, participants are assigned to groups:
 - 1) + A) Randomly to ensure that each group is comparable
 - 2) B) Based on their preferences
 - 3) C) By their demographic characteristics
 - 4) D) By their previous medical history
- Which of the following is a key advantage of randomized controlled trial?
 - 1) A) They are less expensive than observational studies.
 - 2) + B) They can establish causal relationships between interventions and outcomes.
 - 3) C) They require smaller sample sizes than cohort studies.
 - 4) D) They can be conducted in a short time frame.
- 38) In a double-blind randomized controlled trial, who is unaware of the group assignments?
 - 1) A) Only the participants
 - 2) B) Only the researchers
 - 3) + C) Both the participants and the researchers
 - 4) D) Only the data analysts



- What is the term for the group in an randomized controlled trial that does not receive the intervention being tested?
 - 1) A) Experimental group
 - 2) B) Random group
 - 3) C) Treatment group
 - 4) + D) Control group
- 40) Which of the following is important for ensuring the internal validity of an randomized controlled trial?
 - 1) + A) Blinding and randomization
 - 2) B) Large sample size only
 - 3) C) Observational methods
 - 4) D) Convenience sampling
- 41) What is the main goal of screening in epidemiology?
 - 1) A) To diagnose diseases in symptomatic individuals
 - 2) + B) To identify asymptomatic individuals at risk of a disease
 - 3) C) To prevent diseases from occurring
 - 4) D) To provide treatment for chronic conditions
- 42) What does the term "sensitivity" refer to in the context of a screening test?
 - 1) + A) The ability of the test to correctly identify those with the disease
 - 2) B The ability of the test to correctly identify those without the disease
 - 3) C) The overall cost of the screening program
 - 4) D) The ease of conducting the test
- Which of the following is an example of a population that might benefit from screening?
 - 1) A) Individuals with no risk factors for a disease
 - 2) + B) Healthy adults over a certain age for cancer screening
 - 3) C) patients with HIV positive
 - 4) D) None of the above
- 44) In a cross-sectional study, data is typically collected:
 - 1) A) Over several years
 - 2) B) Only from individuals with a specific disease
 - 3) C) Before the outcomes occur
 - 4) + D) At a single point in time
- 45) In case-control studies, recall bias can occur when:
 - 1) A) Cases and controls are chosen randomly from the same population.
 - 2) + B) Participants remember past exposures differently based on their disease status.
 - 3) C) Data is collected from medical records.
 - 4) D) The study is conducted prospectively.
- 46) In a case-control study, how are controls typically selected?
 - 1) + A) Individual from the population or hospitals without the disease
 - 2) B) From hospital patients with the same disease of cases
 - 3) C) Based on their exposure status
 - 4) D) From family members of the cases
- Which of the following best describes the primary design difference between case-control and cohort studies?
 - 1) + A) Case-control studies start with the outcome, while cohort studies start with exposure.
 - 2) B) Case-control studies involve random assignment, while cohort studies do not.
 - 3) C) Cohort studies only assess individuals with a specific disease, while case-control studies include healthy individuals.
 - 4) D) None of the above
- In a study aiming to determine the association between smoking and lung cancer among a group of individuals already diagnosed with lung cancer and a group of individuals are free from lung cancer, which



study design should be used?

- 1) A) Cohort study
- 2) B) Cross-sectional study
- 3) + C) Case-control study
- 4) D) Randomized controlled trial
- To assess the prevalence of obesity among adult population in Sanaa city at a specific point in time, which study design would be most effective?
 - 1) A) Longitudinal study
 - 2) B) Case-control study
 - 3) + C) Cross-sectional study
 - 4) D) Cohort study
- A researcher wants to investigate the long-term effects of a khat chewing on developing heart disease outcomes. Which study design would be the most appropriate?
 - 1) + A) Cohort study
 - 2) B) Cross-sectional study
 - 3) C) Case-control study
 - 4) D) Experimental study