



Epidemiology

Final Exam

رابع - ٢٠٢١

Done by:

Lujayn sarayrh

Designed by:

Razan fawwaz

1- study on 300 IVDU . 140 with HIV , 160 without HIV . Followed up for 2 years , from HIV persons 40 develop TB , from others 60 develop TB . This study is ??

- A ) cohort study
- B ) cross sectional
- C ) case control
- D ) RCT

Answer: A) Cohort study

2-In a study of 300 intravenous drug users (IVDU), 140 with HIV and 160 without HIV were followed for 2 years. Among the HIV-positive individuals, 40 developed TB, and among those without HIV, 60 developed TB. What is the risk ratio (relative risk) for developing TB?

- 1. 0.76
- 2. 1.29
- 3. 0.57
- 4. 1.50
- 5. 0.80

Answer:1. 0.76

3-In a study of 300 intravenous drug users (IVDU), 140 with HIV and 160 without HIV were followed for 2 years. Among the HIV-positive individuals, 40 developed TB, and among those without HIV, 60 developed TB. What is the appropriate risk measurement for this study?

- 1.Odds Ratio
- 2.Risk Ratio
- 3.Prevalence Ratio
- 4.Attributable Risk
- 5.Hazard Ratio

Answer: 2.Risk Ratio

4- What is NOT true about a case control study? Select one:

- a. Provides quick results
- b. Is less expensive relatively
- c. Involves fewer subjects
- d. Gives attributable risk.
- e. Provides prevalence of exposure

Answer: d. Gives attributable risk.

5- Which of the following statements is not correct? Select one:

- a. Cohort study is more appropriate when the disease or exposure under investigation is rare. In comparison to case control study
- b. Cohort study is more expensive in comparison to case control study
- c. cohort study starts with people exposed to risk factor or suspected cause while case control study starts with disease
- d. A long follow-up period often needed with delayed results in a cohort study whereas a case control study yields relatively quick results
- e. Cohort study needs large sample size in comparison to case control study

Answer: a. Cohort study is more appropriate when the disease or exposure under investigation is rare

**6-In a prospective study with 10,000 subjects, 6,000 were given beta-carotene and 4,000 were not. Among the 6,000 who received beta-carotene, 3 developed lung cancer, and among the 4,000 who did not receive beta-carotene, 2 developed lung cancer. What is the best description of the results?**

1. Beta-carotene reduces the risk of lung cancer.
2. Beta-carotene increases the risk of lung cancer.
3. The risk of lung cancer is the same in both groups.
4. The risk of lung cancer is higher in the beta-carotene group.

**Answer: 3. The risk of lung cancer is the same in both groups.**

**7-Diarrhoeal outbreak in village , propatinate in restaurant A = 85% , restaurant B = 15% , restaurant c = 55% , water consumption = 95% , what statement is true ?**

- 1) the source is A
- 2) the source is water consumption
- 3) the source is A,C, water consumption
- 4) the source is b
- 5) we need similar calculations to determine the source

**8-Which study design is most susceptible to recall bias?**

1. Cross-sectional study
2. Case-control study
3. Cohort study
4. Randomized Controlled Trial (RCT)

**Answer: 2. Case-control study**

**9-What is the primary purpose of randomization in a study?**

1. To remove external variables that could bias the study
2. To remove internal variables
3. To ensure equal sample sizes in each group
4. To guarantee that all participants are aware of the study's goals

**Answer: 1. To remove external variables that could bias the study**

**10-For a woman weighing 95 kilograms and with a height of 1.65 meters, what is her BMI?**

1. 40
2. 34.9
3. 20
4. 25

**Answer: 2. 34.9**

**11-Regarding Hepatitis A Virus (HAV) in intermediate endemic areas, which statement is true?**

1. It is common in developed countries.
2. It commonly occurs in early childhood.
3. It leads to an increase in significant Hepatitis A infections.
4. Most children (90%) have been infected with HAV.

**Answer: 2. It commonly occurs in early childhood.**

**12-Establish drug which can prevent death but not treat symptoms:**

- 1) decrease prevalence
- 2) increase incidence
- 3) decrease prevalence and incidence
- 4) increase prevalence

**Answer: 4) Increase prevalence**

**13-What does "notifiable disease" refer to?**

- 1.Regular, frequent, and timely information regarding individual cases
- 2.Regular, frequent, and timely case definition regarding individual cases
- 3.Regular, frequent, and timely treatment regarding individual cases
- 4.Regular, frequent, and timely screening regarding individual cases
- 5.Regular, frequent, and timely surveillance regarding individual cases

**Answer: 1.Regular, frequent, and timely information regarding individual cases**

**14- What is active surveillance?**

- 1.Conducted by contacting health providers in health care centers
- 2.Conducted by relying on health providers to collect surveillance data
- 3.Cheap and not expensive
- 4.Required by law to be reported to government authorities

**Answer. 1.Conducted by contacting health providers in health care centers**

**15-How is surveillance for bioterrorism conducted?**

- 1.By syndrome
- 2.By specific pathogen
- 3.By geographic location
- 4.By demographic information

**Answer: 1.By syndrome**

**16-Selection bias removed by ?**

- 1)single blind
- 2)double blind
- 3)triple blind
- 4)matching
- 5)randomization

**Answer: 5)randomization**

**17-Which type of study provides the most evidence?**

- 1.Randomized double-blind clinical trial
- 2.Systematic review and meta-analysis
- 3.Cohort study
- 4.Cross-sectional study

**Answer: 2.Systematic review and meta-analysis**

**18-Which study design is most effective for establishing causation?**

- 1.Cohort study
- 2.Randomized Controlled Trial (RCT)
- 3.Cross-sectional study
- 4.Case series

**Answer: 2.Randomized Controlled Trial (RCT)**

**19-True about gold standard?**

- 1) one of the most diagnostic measurements
- 2)can measure more than one disease
- 3)can use for screening
- 4) hard to interpret and reporting it
- 5)expensive at second once

**20-Which location is not typically used for measuring subcutaneous fat thickness?**

- 1.Suprailiac
- 2.Waist
- 3.Mid-triceps
- 4.Biceps
- 5.Subscapula

**Answer: 2.Waist**

**21-Which statement about Hepatitis A Virus (HAV) infection is true?**

- 1.Higher recovery rates in adults than in children
- 2.Higher recovery rates in children than in adults
- 3.Subclinical cases are more common in children
- 4.Icteric cases are more common in children

**Answer: 3.Subclinical cases are more common in children**

**22-Which statement about Hepatitis B Virus (HBV) infection is true?**

- 1.Jordan is in a low endemic area.
- 2.Jordan is in an intermediate endemic area.
- 3.High chronic infection rates are seen in adults.

**Answer: 2.Jordan is in an intermediate endemic area.**

**23-Changing harmful lifestyle habits through education to prevent the occurrence of coronary heart disease is an example of:**

- 1.Primordial prevention
- 2.Primary prevention
- 3.Secondary prevention

**Answer: 2.Primary prevention**

**24-High chronic infection rates for Hepatitis B Virus (HBV) are most commonly seen in which group?**

- 1.Childhood
- 2.Perinatal
- 3.Adults
- 4.Surgeons

**Answer: 2.Perinatal**

**25-If a pathogen is still present in the environment but there is no transmission of the disease, this situation is best described as:**

- 1.Elimination
- 2.Eradication
- 3.Disease control
- 4.Extinction

**Answer: 1.Elimination**

**26-To stop the emergence of a disease by removing risk factors, which type of prevention is most appropriate?**

- 1.Primordial prevention
- 2.Primary prevention
- 3.Secondary prevention
- 4.Tertiary prevention

**Answer: 1.Primordial prevention**

**27- If a questionnaire is given to 20 individuals (both male and female), what type of validity is being assessed here?**

- 1.Face validity
- 2.Content validity
- 3.Construct validity
- 4.Criterion validity

**Answer: 1.Face validity**

**28- A man with a hip-to-waist ratio of 0.8 falls into which category?**

- 1.Normal body weight
- 2.Healthy
- 3.Preobese
- 4.Overweight

**Answer: 1.Normal body weight**

**29-In a population where the prevalence of hypertension is 20% and hypotension is 10%, what is the percentage of individuals having either of the two conditions if these conditions are mutually exclusive?**

- 1.15%
- 2.20%
- 3.30%
- 4.35%

**Answer: 3. 30%**

**30-What is the most important for community physician?**

- A. Prevalence
- B. Incidence
- C. Communicability
- D. Attributable risk

**Answer: D. Attributable risk**

**31-A study on 100 individuals assesses the relationship between tobacco chewing and the development of oral cancer. Out of the 50 people diagnosed with oral cancer, 30 are tobacco chewers. Among the remaining 50 healthy individuals, 10 are tobacco chewers. What is the risk measurement?**

- 1.6
- 2.2.25
- 3.No sufficient data
- 4.1.5

**Answer: 2. 2.25**

**32-What level of salt intake is considered an additional risk factor for hypertension?**

- 1.1 gm
- 2.5 gm
- 3.7 gm
- 4.10 gm

**Answer: 3. 7 gm**

**33-Establishing a causal relationship in epidemiology requires which of the following?**

- 1.Strength
- 2.Temporal relationship
- 3.Short duration
- 4.Specificity

**Answer: 2.Temporal relationship**

**34-Most important for community physician?**

- 1) relative risk
- 2 ) attributable risk\*
- 3) incidence of disease
- 4) prevalence of disease
- 5) odds ratio

**Answer: 2. Attributable risk**

**Explanation**

due to = attributable risk = cause هي حكت اكثر من مرة في المحاضرة

**35-Regarding Hepatitis B Virus (HBV) risk, which statement is true for surgeons?**

- A. Surgeons have 50 times more risk of HBV than the general population.
- B. Surgeons have 50 times more risk of HBV than healthcare workers.
- C. Surgeons have 10 times more risk of HBV than the general population.
- D. Surgeons have the same risk of HBV as healthcare workers.

**Answer: A. Surgeons have 50 times more risk of HBV than the general population.**

**36-In a building with 400 females and 200 males, if the incidence of a specific outcome is 20% among females and 10% among males, what is the relative risk for males?**

- A. 0.5
- B. 0.3
- C. 1
- D. 1.5

**Answer: A. 0.5**

**37-Which of the following questions best describes reliability?**

- A. What is being measured?
- B. What is its consistency?
- C. What is the quality of reading?
- D. How is it validated?

**Answer: B. What is its consistency?**

**38-Which of the following statements about prevention in the pathogenesis phase is FALSE?**

- A. Subclinical phase
- B. Entry of organism
- C. Signs & symptoms
- D. Screening is of no value
- E. Tertiary prevention

**Answer: D. Screening is of no value**

**39-Regarding food-borne outbreaks, which statement is TRUE?**

- A. They come from eating food from different sources.
- B. They come from eating food from common sources.
- C. They are only caused by bacteria.
- D. They cannot be traced back to a single source.

**Answer: B. They come from eating food from common sources.**

**40-Which of the following does NOT negatively impact the effectiveness of screening?**

- A. Community awareness about the disease
- B. High cost
- C. Lack of follow-up for positive cases
- D. Low sensitivity of the test

**Answer: A. Community awareness about the disease**

**41-The ability of a surveillance system to elicit the cases it was intended to detect is known as:**

- A. Positive predictive value
- B. Representativeness
- C. Sensitivity
- D. Specificity
- E. Accuracy

**Answer: C. Sensitivity**

**42-Which of the following best describes the purpose of screening?**

- A. To determine the exact diagnosis of a disease.
- B. To inform individuals about the symptoms of a disease.
- C. To identify individuals at risk of a disease before symptoms appear.
- D. To manage and treat individuals who already have the disease.

**Answer: C. To identify individuals at risk of a disease before symptoms appear.**