# **Epidemiology final archive 2021/2022**

## 31 Questions directly from archive

2-In the randomized control trial, randomization is done to avoid? Select one:

- a. Recall bias
- b. Observer's bias
- c. Interviewer's bias
- d. Selection bias
- e. Outcome bias

8-All the followings are the advantages of a cross-sectional study, EXCEPT one?

- a. Can be used to study several associations at once
- b. Can be conducted over a short period of time
- c. Produce prevalence data
- d. Relative risk can be calculated
- e. They are relatively fast and inexpensive

9-Gold standard study for clinical research is? Select one:

- a. Randomised double-blind trial
- b. Case control study
- c. Ecological study
- d. Retrospective cohort study

e. Systematic meta-analysis احتمال الجواب الصح يكون a مش e بس الدكتورة مش موضحة

عن شو قصدها بالزيط

10-In a study begun in 1995, a group of 3000 adults in New York were asked about alcohol consumption. The occurrence of cancer was studied in the group between 2010 and 2019. This is an example of? Select one:

- a. Cross sectional study
- b. Case-Control study
- c. Clinical trial
- d. Concurrent cohort study
- e. Ecological study

بس ارقام غير

12-Regarding the prevalence one statement is not correct? Select one:

- a. It quantifies the proportion of individuals in a population who have the disease at a specific instant
- b. Having a direct relation with duration of a disease
- c. With a successful treatment of the disease the prevalence rate will decreases
- d. The denominator is the total population at risk of having the disease
- e. Immunization has no effect on prevalence

15-The incidence rate of a disease is 5 times greater in women than in men, but the prevalence rates show no sex difference. The best explanation is that? Select one:

- a. The case fatality rate for this disease is lower in women
- b. The case fatality rate for this disease is higher for women
- c. The duration of disease is shorter in men
- d. Risk factors for developing the disease are more common in women
- e. The case fatality rate for this disease is equal in men and women

17-To investigate the effect of tobacco chewed on oral cancer, it's observed that 50 out of 100 patients were tobacco chewers, as compared to 20 tobacco chewers out of 100 control subjects. The odds ratio of oral cancer associated with smoking will be?

Select one:

- a. 3.0
- b. 40
- c. 4.0
- d. Insufficient data given for calculation
- e. 4%
- 22-All of the following are true regarding the Ratio EXCEPT?
- a. Numerator is component of denominator
- b. Numerator is not a component of denominator
- c. Numerator & amp: denominator are not related values
- d. It is expressed as a number
- e. Ratio is less useful than rates in epidemiology

Similar question about Rate

Q: Which of the following is not true about rate

Less useful in epidemiology than ratio

24-Incidence rate is calculated from? Select one:

- a. Case-control study
- b. Case report
- c. Retrospective study
- d. Prospective study
- e. Cross -Sectional study

the correct option for us was Cohort study (same

name as prospective)

28-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
- 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
- 35-Compared with the general population, the risk of developing HBV infection among surgeons is? Select one:
- a. The same
- b. More than twice greater
- c. 10 to 20 times greater
- d. 50 times greater
- e. 100 times greater
- 38-Communicability of disease is assessed by? Select one:
- a. Case fatality rate
- b. Secondary attack rate
- c. mortality rate
- d. Incubation period
- e. chronicity

42-Relative risk is the measure of the strength of the association between the suspected cause & event. Relative risk of one indicates?

Select one:

- a. Positive association exposure & amp: disease
- b. No association at all
- c. Protective state
- d. 2 times high association

e. 4 times higher association

هاد السؤال بس كان عنا بحكى عن الodds ratio

43-A randomized clinical trial was carried out, studying the effect of a new drug designed to prevent breast cancer (CA) occurring In this study, 1000 healthy women between the ages of 60 and 65 were given the drug, and 1000 were given the placebo for 5 years. Ten and 40 CA breast cases were detected among those given the drug, and placebo respective. The relative risk is?

Select one:

a. 0.24

b. 0.25

c. 0.4

d. 4.0

e. 4.125

46-Co infection must exist for replication and infection to occur in Select one:

- a. Hepatitis A virus (HAV)
- b. Hepatitis B virus (HBV)
- c. Hepatitis C virus (HCV)
- d. Hepatitis D virus (HBV)
- e. Hepatitis E virus (HEV)

## 51-Double blind study means?

#### Select one:

- a. Observer is blind about the study
- b. Person or group being observed is blind about the study
- c. Both eyes of the observer are blind
- d. Interpreters and analyser are blind about the study
- e. Both observer and person or group being observed is blind about the study

57-Natural history of disease is best studied by? Select one:

- a. Cross sectional study
- b. Cohort study.
- c. Case series study.
- d. Case-control
- e. Ecological study.

58-In a study of the cause of lung cancer, patients who had the disease were matched with cancer free individuals. The frequency of cigarette smoking was then compared in the two groups. What type of study was this? Select one:

- a. Prospective cohort
- b. Cross sectional
- c. Experimental
- d. Case-control
- e. Case series

60-Denominator while calculating the secondary attack rate includes?

- a. Midyear population
- b. All the close contacts
- c. All susceptible in the whole village
- d. All susceptible amongst close contact
- e. All the people living in next fifty houses

62-Epidemiological marker of Hepatitis B infection is?

- a. HBs Ag
- b. Anti HBs
- c. Anti HBc
- d. HBe Ag
- e. Anti HBe

64-50 people are suffering from cholera in a population of 5000. Out of those 50, suffering from cholera, 10 died. But the total deaths are 50. What is the death rate?

- a. 10 per 1000
- b. 5 per 1000
- c. 1 per 1000
- d. 20 per 100
- e. 2 per 1000

## 8000 نفس صياغة السؤال بالزبط بس بدل 50 كان 80 و بدل 5000 كان

68-Regarding the Incidence one is correct?

#### Select one:

- a. It is used to estimate the probability of risk of developing disease at a specific time
- b. It measures the presence of the disease on a single short time point
- c. The denominator is the mid-year population
- d. It quantifies the proportion of individuals in a population who have the disease at a specific instant
- e. The numerator is the number of cases in a community

## 72-One is true about prevalence?

- a. Decreases with decrease in case fatality
- b. It is the ideal measure for studying disease aetiology or causation
- c. It is a ratio
- d. Increases with increase in duration of disease
- e. It is estimated through a case-control study

74-Incidence and prevalence having a relationship which expresses as the? Select one:

- a. Sum of incidence and mean duration of disease
- b. Dividend of incidence and mean duration of disease
- c. Product of incidence and mean duration of disease
- d. Difference of incidence from the mean duration of disease
- e. Subtract of incidence from duration of disease

44-in a double blind clinical drug trial?

#### Select one:

- a. Each patient receives a placebo
- b. Each patient receives both (double) treatments
- c. The patients do not know which treatment they are receiving
- d. The patients do not know that they are in a drug trial
- e. Each patient double checked daily

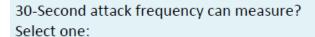
59-The development of the chronic disease. in more than 50% of persons, following an acute infection of?

- a. Hepatitis A virus
- b. Hepatitis B virus
- c. Hepatitis C virus

- d. Hepatitis D virus
- e. Hepatitis E virus

29-In disease prevention, the specific protection mode includes the following EXCEPT? Select one:

- a. lodisation of salt
- b. Chemoprophylaxis for meningococcai meningitis.
- c. Usage of condoms
- d. Personal hygiene and Environmental sanitation
- e. Vaccinations.



- a. Viability of the organism
- b. Antigenic power of micro-organism
- c. Pathogenicity and virulence of micro-organism.
- d. Period of communicability
- e. Dose of infection (inoculums)

36-Extrinsic incubation period is the?

#### Select one:

- a. Time between exposure to infection and appearance of symptoms or signs of disease
- b. Time required for 50 96 of the cases to occur following exposure.
- c. Period between the time when the vector gets infective and time vector becomes infected
- d. Period between the time when the vector gets infected and time vector becomes infective
- e. time between the onset of the primary case and the secondary case.

# 50-Prevention of emergence of risk factor is? Select one:

- a. Specific protection
- b. Primary prevention
- c. Secondary prevention
- d. Tertiary prevention
- e. Primordial prevention

#### Questions not from archive

## 1. A study on a screening test was carried out and the results were as follows

|                 | Cases | Healthy | total    |
|-----------------|-------|---------|----------|
| Positive result |       |         |          |
| Negative result | 75    | 175     | (75+175) |

How do you calculate the negative predictive value 2 175 / (75+175)

- 2. The best study to investigate causation between risk factor and outcome?
  - a. Randomized control trial



- 3. In a country with a population of 20 million, 10 million people live in highly polluted cities, when calculating the incidence of pollution-induced asthma, what should be the denominator?
  - a. 10 million
- 4. When investigating an outbreak of suspected cases of swine flu (H1N1), the first step the ministry of health should do is?
  - a. Verify the diagnosis
- 5. In a population of 800 people, 100 were infected with TB and 20 people died from TB, what is the case fatality rate?
  - a. 20%
- 6. All of the following are characters of the diseases that are screened except?
  - a. The disease has a short preclinical period
- 7. One of the difficulties of promoting screening tests to the public is that the person that needs to be screened is all of the following except?
  - a. Severely ill and cannot reach the screening center
- 8. In a population of 1000, cases of the disease were 200, the prevalence of the disease is?
  - a. 0.2??
  - b. 20
  - c. 2
- 9. One of the characteristics of a well-conducted outbreak investigation is that
  - a. Every case is lab-confirmed ??
  - b. The case definition includes three categories: definite, probable, possible
- 10. When using a drug that prevents death but has no effect on recovery, what will be the outcome?
  - a. The prevalence of disease will increase
- 11. Screening is defined as:
  - a. Early detection of disease in the preclinical stage
- 12. When calculating incidence, the denominator is?
  - a. Population at risk
- 13. All of the following are achieved by screening except?
  - a. Increasing burden on tertiary disease prevention
- 14. The time period where transmission directly or indirectly from an infected person is possible is called?
  - a. Period of communicability
- 15. Which of the following is not a mode of transmission of Brucellosis?
  - a. Person-to-person
- 16. Brucellosis reservoir is?
  - a. Goat
- 17. Which of the following is true about HAV infection?
  - a. The subclinical course of the disease is higher in children than adults

- 18. Two screening tests were developed for DM, test A level was 160mg/dl, and test B level was 130mg/dl, what is the correct interpretation?
  - a. Sensitivity of test A is greater
  - b. Specificity of test B is greater
  - c. False positives greater with test A
  - d. False negatives greater with test A??
- 19. The gold standard test is
  - a. The most accurate tool for diagnosis
- 20. The measure of how well a surveillance system can elicit cases is called?
  - a. Sensitivity
- 21. In randomized controlled trials, randomization is done to
  - a. Eliminate selection bias
- 22. Which of the following is true about areas of intermediate endemicity of HAV?
  - a. Increased incidence of clinically prevalent cases
- 23. What is correct about prevalence?
  - a. It is a balance between incidence, mortality, and recovery
- 24. In a nursing home, influenza cases were recorded for 3 weeks what is the probable route of spread (average incubation period of influenza is less than 5 days)
  - a. Propagated
- 25. All of the following are advantages of Case-control studies except?
  - a. Relative risk calculation
- 26. A cohort study design is used for all of the following except?
  - a. When incidence of the disease in exposed population is very low
- 27. What study design has the most recall bias?
  - a. Cross-sectional??
- 28. Active surveillance is?
  - a. Epidemiologists contact hospitals for records of diseases
- 29. A study found out the incidence of cancer in smokers to be 10 per 1000, while the incidence in non-smokers was 1 per 1000, what is the attributable risk?
  - a. 90%
- 30. 92% of lung cancer is from cancer, this statement is describing?
  - a. Attributable risk
- 31. Looking for "reliability" in data means?
  - a. Consistent results
- 32. A 10-member family of 2 parents and 8 children who are susceptible to measles, a primary case occurred and after a short period of time 4 people were infected, what is the secondary attack rate?
  - a. 40%?
  - b. 48.7%
  - c. 57.14% √

- ناسية باقي الخيارات d.
- 33. The odds ratio of eating fresh fruits to prevent oral cancer was 0.6 with 95% confidence interval (range 0.4-0.9) what can we say about the association between eating fresh fruit and oral cancer (مش هيك بالزبط صياغة السؤال)
  - a. Uncertain from the data provided ??
  - ناسية باقى الخيارات b.
- 34. In a population of 30000 people, there are 300 cases of a disease, what is the incidence of the disease?
  - a. 10 per 1000
- 35. Virulence is measured by?
  - a. Case fatality rate
- 36. Chronic HBV is most likely in
  - a. Perinatal infection
- 37. Cross-sectional study is called?
  - a. Prevalence study
- 38. A prostate cancer screening test was performed on 100,000 men, 4000 men tested positive and 800 of these 4000 were true positives and had confirmed biopsy of prostate cancer, out of the 96,000 that tested negative, 100 developed cancer the following year so they were considered false negatives, what is the positive predictive value?
  - a. 20%
- 39. Women with multiple partners had 5 times the risk of cervical cancer when compared to women with a single partner, the measurement used is?
  - a. Relative risk
- 40. 400 women and 200 men were in the building, what is the relative risk for men?
  - a. 0.5
- 41. In a population, the prevalence of hypertension is 20% and the prevalence of hypotension is 10%, what is the probability that someone in the population would have either of these diseases?
  - a. 30%
- 42. The road traffic association found that more accidents happen in blue cars, so their interpretation is that the person is less safe riding a blue car, this interpretation is?
  - a. Incorrect, because it is not based on rates
- 43. A screening test done on 200 people found 130 positive results, 60 results were considered false positives and 30 results were considered false negatives, what is the sensitivity of the screening test?
  - a. 70%
- 44. Elimination of disease is?
  - a. Termination of all disease
- Q 4To study the relation of chewed tobacco and oral cancer, it's observed that out of 50 patients(oral cancer) 30 were tobacco chewers as compared to out of 50 control (oral cancer), 10 were tobacco chewers subjects. This is an example of?
  - Cross sectional study
  - B. Case-Control study
  - C. Clinical trial
  - D. Concurrent cohort study
  - E. Ecological study
  - F. Case report

## سؤال نفس فكرة هاد السؤال بس ارقام مختلفة و الجواب b

- 46. A RCT was done to investigate effects of exercise on mortality after myocardial infarction, out of the 100 controls (did not exercise) 30 died, and out of the 100 patients who exercised 50 died, find the relative risk of exercise?
  - a. (50/100) / (30/100) = 1.67