



**1. The geographical differences in disease occurrence are important dimensions of**

- A) Molecular Research
- B) Analytical Research
- C) Applied Research
- D) Descriptive Research
- E) Genetic Research

**ANSWER : D**

**2. In designing research questions, PICOT model refers to:**

- A) Population, Intervention, Comparison, Objective, time
- B) Patient, Intervention, Comparison, Outcome, Time
- C) Patient, Inclusion criteria, comparison, outcome, Time
- D) Population, Inclusion criteria, Comparison, outcome, Time
- E) Patient, Intervention, Control group, outcomes, and time

**ANSWER : B**

**3. Odd ration equation is? (with a given data that will help you to write the correct equation)**

- Diseased with risk factor = a
- Diseased without risk factor = b
- Not diseased with risk factor = c
- Not diseased without risk factor = d

**ANSWER : ODD ratio= $ad/bc$**

**4. Relative risk measures indicate which of the following?**

- A) The probability that a person who is exposed to a certain risk factor will develop the disease in question
- B) How much more likely it is that a patient who has the disease has been exposed to a particular risk factor compared to a healthy individual
- C) The magnitude of the association between a disease (or other related health outcome) and a suspected risk factor
- D) the incidence of a disease
- E) The risk difference between those exposed and those who are not exposed

**ANSWER : A**

**5. One of the followings is an analytical study design:**

- A) Case Control study
- B) Case series
- C) Survey
- D) Randomized clinical trial
- E) Community clinical trial

**ANSWER : A**

**6. All those individuals or bodies who would have an interest in the questions you are asking and the results obtained**

- A) Stakeholders
- B) Research team
- C) Ethics Committee
- D) Research Committee
- E) Coauthors

**ANSWER : A**

**7. All of the following statements about the attributable risk of a disease are true EXCEPT:**

- A) Attributable risk is synonymous with the incidence of the disease
- B) Attributable risk is the probability that a healthy individual will develop the disease during a specified time period
- C) Attributable risk is the underlying rate from which RR is derived
- D) Attributable risk is the ratio of the incidence of the disease among those exposed to the relevant risk factor to the incidence of the disease among those with no such exposure
- E) A+C

**ANSWER : D**

**8. For the method of data collection in surveys, the followings are advantages for face to face interviews when compared with self-completed questionnaires, EXCEPT:**

- A) Quick answers
- B) Participation of illiterate people
- C) Less incomplete responses
- D) Clarification of ambiguities
- E) Low response rate

**ANSWER : E**

9. You have been selected to be a reviewer for a survey questionnaire, you need to make a decision about the following question:

Do you know anything about prediabetes?

Your decision about this question is to:

- A) Keep it as it is
- B) Delete it

**ANSWER : B**

10. All of the following about case - control studies true except?

**ANSWER : More expensive**

11. When we take 20 student of each faculty to do a certain study, sampling type is?

**ANSWER : Quota sampling**

12. You will conduct a study on complications of type II Diabetes Mellitus in Jordan in Amman, Irbid and Maan. One of the following groups should be included in the pilot phase:

- A) An expert in the field
- B) Endocrinologists from different sites
- C) Your colleagues
- D) 30 Patients with type II DM in Irbid
- E) Primary healthcare workers in Irbid

**ANSWER : D**

**13. Best study design to calculate relative risk?**

**ANSWER : Cohort**

**14. All the followings are limitations for disease specific questionnaires, Except:**

- A) They are not available for all diseases.
- B) They may be insensitive to subtle but important changes in status with respect to a specific disease.
- C) They may be lengthy and detailed.
- D) They have limited role in comparisons with other conditions or with the general population.

**ANSWER : B**

**15. Case series = build up a picture of the natural history of a disease**

**16. You are conducting a study on prevalence of complications rate among adult hypertensive patients in Jordan, you went to the cardiac center and collected a sample of 50 males and 50 females diagnosed with hypertension, this non-probability sampling technique that we should avoid in our research is called:**

- A) Convenient Sampling
- B) Quota Sampling
- C) Stratified sampling
- D) Cluster sampling

**ANSWER : B**

**17. The following is true about case-series?**

**ANSWER : Build a natural history of the disease**

**18. The main limitation for case series:**

- A) Generation hypothesis
- B) No comparison group
- C) Cannot assess symptoms and signs
- D) Difficult to generate case definition based on them

**ANSWER : B**

**19. All of the following about cohort are true except?**

**ANSWER : More bias than cross sectional**

**20. Studying correlations in incidence of type II diabetes mellitus and coffee drinking according to world data from different countries can be achieved quickly through:**

- A) Case report
- B) Cross-sectional study
- C) Ecological study
- D) Cohort study

**ANSWER : C**

21. In survey , we take samples starting from 1 , 6 , 11 , 16 , 21 , 26 , 31 ... the method of study is:

**ANSWER : Systematic sampling**

22. To study risk factors of rare disease, we need to conduct:

- A) Cohort study
- B) Case control study
- C) Cross-sectional study

**ANSWER : B**

23. One of the followings is an analytical study design:

- A) Survey
- B) Community clinical trial
- C) Case series
- D) Randomized clinical trial
- E) Case Control study

**ANSWER : E**

24. The best number of controls to cases in case control studies:

- A) 1 to 1
- B) 3 to 1
- C) 4 to 1

**ANSWER : C**

**25. Which probability sampling method is more suitable for representing minor ethnicities in equal chance of groups selection?**

- A) Cluster sampling
- B) Systematic sampling
- C) Stratified sampling
- D) Simple random sampling
- E) Convenience sampling

**ANSWER : C**

**26. In Evidence Based Medicine (EBM) the strongest scientific evidence comes from:**

- A) Experimental studies
- B) Cohort studies
- C) Meta-analysis and systematic reviews
- D) Case Control studies
- E) Cross-sectional studies

**ANSWER : C**

**27. Which study design is more suitable for investigating prevalence?**

- A) Cohort study
- B) Cross sectional
- C) Case control
- D) Clinical trial

**ANSWER : B**

**28. Which study design is appropriate for examining a common risk factor's association with multiple diseases?**

- A) Cohort study
- B) Cross sectional
- C) Case control
- D) Clinical trial

**ANSWER : A**

**29. When we selected a ready to use questionnaire for our study such as pain scale, quality of life score, clinical score, we need to provide the validity and reliability of this questionnaire in the methods section:**

- A) True
- B) False

**ANSWER : A**

**30. When we conduct phase 0 clinical trial, do we need to apply for IRB approval:**

- A) No, we do not need to apply because the study is on animals not humans
- B) Yes, we need to apply for IRB approval

**ANSWER : B**

**31. You will conduct a survey on knowledge of medical students about medical research, do you need to apply for an IRB approval?**

- A) Yes, I need to apply for an IRB approval. The IRB committee will decide on the consent form. Whether or not I need to use it.
- B) No, I will not. It is a simple survey. No IRB approval and no consent form.

**ANSWER : A**

**32. What study design is suitable for examining the potential reduction of type 2 diabetes through the consumption of fiber-rich meals?**

- A) Cohort study
- B) Cross sectional
- C) Case control
- D) Clinical trial

**ANSWER : A**

**33. The first paragraph of the discussion should include:**

- A) Key finding
- B) main strength of the study
- C) Reason of the study
- D) study key limitations

**ANSWER : A**

**34. The first paragraph in the discussion should include:**

- A) Background results
- B) Key recommendation
- C) summary of the main result the study according to the primary outcome

**ANSWER : C**

**35. ALL of the following are features of case control EXCEPT:**

- A) suitable for rare diseases
- B) not- suitable for rare exposures
- C) inexpensive
- D) can show the relationship between effect-cause
- E) can measure incidence

**ANSWER : E**

**36. Odds ratio for smoking as a risk factor for congenital heart disease was calculated to be 5 in a case control study with a confident interval of 0.8-10. is statistically significant:**

- A) Yes
- B) No

**ANSWER : B**

**37. All of the following is a characteristic of case-control studies EXCEPT:**

- A) Can measure incidence
- B) It is small and inexpensive
- C) Can show the relationship effect-cause
- D) Is suitable with Rare diseases
- E) Is not suitable with Rare exposures

**ANSWER : A**

**38. Women with multiple partners had 5 times the risk of cervical cancer when compared to women with a single partner, the measurement used is?**

**ANSWER : Relative risk**

**39. The minimum number for IRB committee members?**

- A) 7
- B) 5
- C) 2
- D) 3

**ANSWER : B**

# Extra

40. Which of the following is Not a feature of a good research question ?

- A) The first step in a successful research project
- B) Different from previous work .
- C) Can be measured
- D) Has a consensus about the answers

**ANSWER : D**

41. If a Relative Risk (RR) is calculated to be 2.5, how would you characterize the strength of association?

- A) High association.
- B) Moderate association.
- C) Weak association.
- D) No association exists.

**ANSWER : A**

42. Which of the following best describes a risk factor in relation to a disease?

- A) Any factor negatively associated with a disease ( $RR < 1$ ).
- B) Any factor positively associated with a disease ( $RR > 1$ ).
- C) Any factor that has no association with a disease.
- D) Any factor that has an unknown association with a disease

**ANSWER : B**

43. In a case-control study, Cases who were found to be exposed were 40 out of 100, while only 25 out of 100 Controls were exposed. The odds Ratio is :

- A) 4
- B) 2
- C) 0.50
- D) 0.25

**ANSWER : B**

# Extra

44. In a cohort study, 40 out of 100 exposed developed the disease, while only 25 out of 100 unexposed developed the disease. The Rate Ratio is :

- A) 1.6
- B) %15
- C) 2.0
- D) %63

**ANSWER : A**

45. In a cohort study, the incidence rate was 10 in the unexposed and 25 in the exposed. Attributable Risk Ratio would be :

- A) %40
- B) %60
- C) %15
- D) %25

**ANSWER : B**

46. If a Relative Risk (RR) is calculated to be 0.8, what can be inferred about the association between the exposure and the outcome?

- A) There is a high association.
- B) There is a moderate association.
- C) There is a weak association.
- D) There is a negative association (protective effect).

**ANSWER : D**

47. Which of the following statements about preventive factors is true?

- A) They are associated with an increased occurrence of disease.
- B) They are associated with a decreased occurrence of a disease ( $RR < 1$ ).
- C) They are not amenable to change.
- D) They have no association with a disease.

**ANSWER : B**

# Extra

48. What type of studies would be the best approach to "compare rates of new corona cases among Jordanian people with different exposure histories ?

- A) Correlational studies
- B) Case series
- C) Case-control studies
- D) Cohort studies

**ANSWER : D**

49. Which of the following is TRUE regarding cohort studies ?

- A) Participants may have the disease of interest at the start of the study
- B) Retrospective studies should be used if adequate individuals with the outcome are available
- C) Retrospective studies should be used to examine multiple exposures and outcomes
- D) Prospective studies should be used if exposure is relatively uncommon

**ANSWER : B**

50. The lack of generalizability is a problem to watch out for in which of the following approaches ?

- A) Experimental studies
- B) Case series
- C) Cohort studies
- D) Case-control studies

**ANSWER : B**

**The End**  
**Good Luck シ**