

Past Papers

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



FINAL – Weeks 5 & 6 (RESEARCH) COMMUNITY

﴿ وَإِنْ تَتَوَلَّوْا يَسْتَبَدِلْ قَوْمًا غَيْرَكُمْ ثُمَّ لَا يَكُونُوا أَمْثَلَكُمْ ﴾

اللهم استعملنا ولا تستبدلنا

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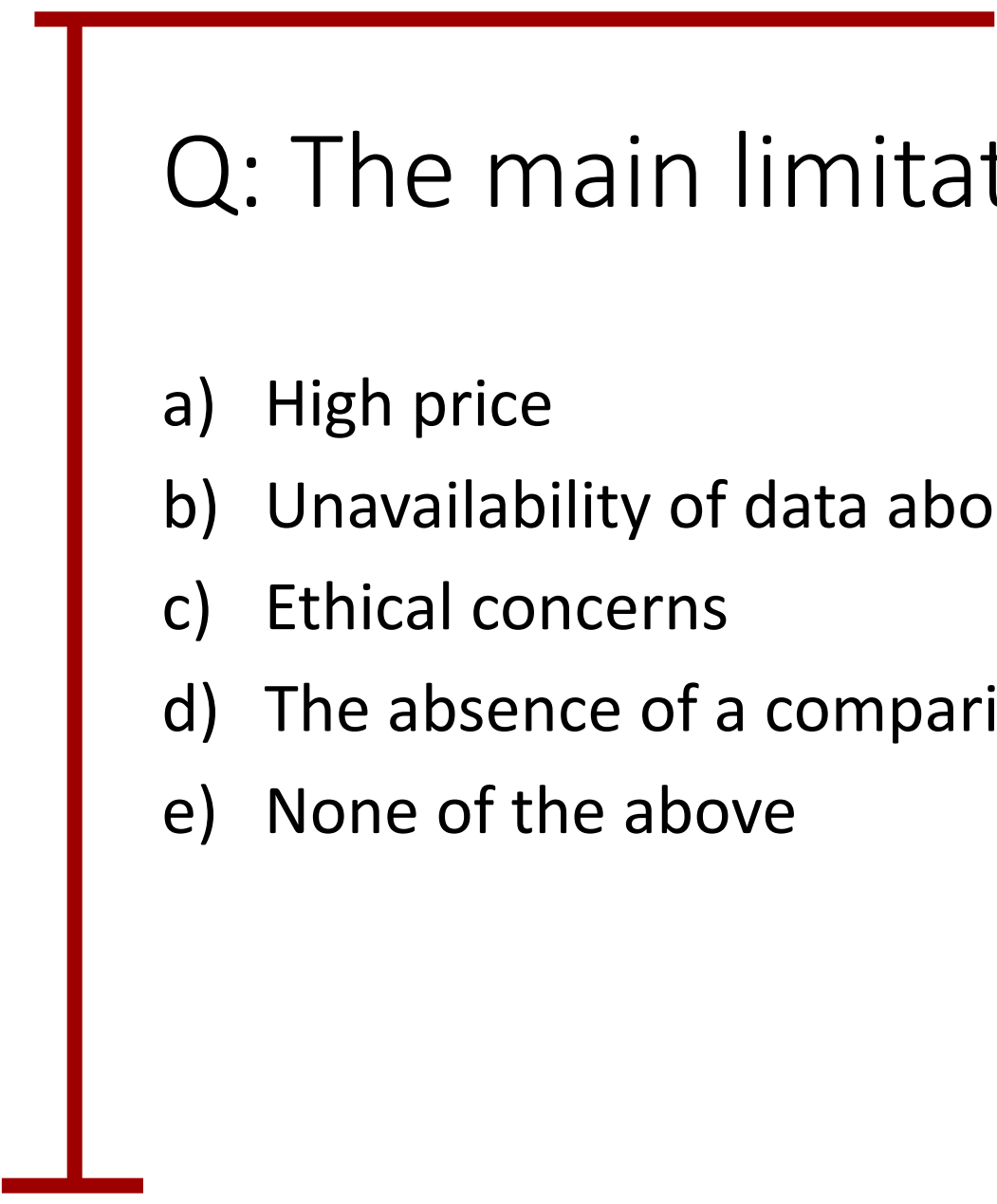


STUDY DESIGN

23 Qs

Q: One of the followings is an analytical study design:

- a) Case-control
- b) Case series
- c) Surveys
- d) Randomized clinical trials
- e) Community trials



Q: The main limitation for case series:

- a) High price
- b) Unavailability of data about the patients
- c) Ethical concerns
- d) The absence of a comparison group
- e) None of the above

Answer: d

Q: Best study design to calculate relative risk?

- a) Case-control
- b) Cross-sectional
- c) Prevalence studies
- d) Cohort
- e) None of the above

Answer: d

Q: Which of the following is used to build up a picture of the natural history of a disease?

- a) Case-control
- b) Retrospective cohort
- c) Case series
- d) Preventive trials
- e) Surveys

Q: All the following about cohort are true except?

- a) Cannot test current hypotheses
- b) Can calculate relative risk
- c) Has more risk of bias compared with cross-sectional
- d) Can be pro- or retrospective
- e) 2 groups based on exposures

Q: 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) Case-control study
- c) Randomized control trial
- d) Ecological study
- e) Cross-sectional study

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

- a) Cohort
- b) Case-control
- c) Cross-sectional

Q: In Evidence Based Medicine (EBM) the strongest scientific evidence comes from:

- a) Individual experimental studies
- b) Cohorts
- c) Case-controls
- d) Systematic reviews and meta-analyses
- e) Descriptive observational studies such as surveys

Q: Which study design is more suitable for investigating prevalence?

- a) Cohort
- b) Cross-sectional
- c) Case-control
- d) Clinical trials

Answer: b

Q: Which study design is appropriate for examining a common risk factor's association with multiple diseases?

- a) Cohort
- b) Case-control
- c) Cross-sectional
- d) Preventive trials

Answer: a

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

- a) Cohort
- b) Case-control
- c) Cross-sectional
- d) Preventive trials

Answer: **a** or **d**

If fiber-rich meals is a normal diet and this 'exposure' is observed → cohort (a)

If the study includes changing the diet of the subjects → preventive trial (d)

Q: All the following are features of case-control
EXCEPT:

- a) Suitable for rare diseases
- b) Not suitable for rare exposures
- c) Inexpensive
- d) Can show relationship between cause and effect
- e) Can measure incidence

Q: All the following are characteristics of case-control EXCEPT:

- a) Able to study diseases with long latency
- b) It is a prospective study
- c) Not suitable for rare exposure
- d) Suitable for rare disease
- e) It cannot measure the incidence

Q: Choose the correct regarding the cross-sectional study?

- a) Can measure the incidence
- b) Not ideal for seasonal fluctuations
- c) Suitable for communicable diseases of short duration

Q: To study the burden of common chronic disease?

- a) Incidence of disease in cohort
- b) Incidence of disease in cross sectional
- c) prevalence of disease in cohort
- d) prevalence of disease in cross sectional

Q: The odd ratio is present in which study design?

- a) Cohort
- b) Case report
- c) Case series
- d) Case-control
- e) Ecological

Answer: d

Q: The study of 2 antibiotics for UTI's with 2 groups each is assigned 1 of the 2 antibiotics is..

- a) Parallel trial
- b) Cross-over trial

Q: The study of a new bronchial asthma drug on a group of patients then giving them the current best drug is..

- a) Parallel trial
- b) Cross-over trial

Answer: b; the group are their own controls

Q: Compare the presence of modifiable risk factor of residents of Aqaba and Irbid?

- a) Cohort
- b) Case report
- c) Case series
- d) Case control
- e) Ecological

Answer: e

Q: Brazilian researcher conducted a study to compare chickenpox vaccine history among 3,094 children with hearing difficulty and 10,621 children without hearing difficulty. (They found no association). This is an example of which type of study?

- a) Case-control
- b) Descriptive
- c) Cohort
- d) Clinical trial
- e) Experimental

Answer: a

Q: A study examined the relation between physical activity and prostate cancer in 25 EU nations, what study design was probably used?

- a) Ecological
- b) Experimental
- c) Case series
- d) Cross-sectional
- e) Cohort

Answer: a

Q: Which of the following is a descriptive epidemiological study design?

- a) Cohort
- b) Experimental
- c) Case-control
- d) Ecological
- e) Community trial

Answer: d

Q: To determine the effectiveness of influenza vaccines in elderly people, a group of vaccinated elderly, and another group of unvaccinated elderly were studied. They were followed up to for developing influenza. The results suggest that the elderly who are vaccinated had a reduced risk of hospitalization for pneumonia.

- a) Case-control study
- b) Cross-sectional study
- c) Randomized controlled clinical trial (RCT)
- d) Ecological study
- e) Cohort study

Answer: **e**; note that the vaccination was not part of the study

Other Topics

10 Qs

Q: At which time is the flu vaccine is given in Jordan:

- a) February
- b) September
- c) October
- d) August
- e) November

Answer: c

Q: What is the first line method of nicotine cessation for ischemic heart disease patients with moderate or high smoking?

- a) Behavioral treatment
- b) Patches and gum
- c) Varenicline
- d) Bupropion

Answer: a

Q: Best nicotine replacement therapy method for moderately and highly dependent patients:

- a) Nicotine patches
- b) Patches and Bupropion
- c) Patches and gum

Answer: c

Q: A wedge population pyramid indicates:

- a) High BR, High DR, and low growth rate
- b) High BR, Low DR, and high growth rate
- c) Low BR and Low DR
- d) Typical of primitive country
- e) Typical of developed country in evolved demographic equilibrium

Q: Which of the following methods should be used to assess the difference in death rates between the company workers and population in Jordan?

- a) Crude death rate
- b) Age-specific death rate
- c) Indirect Standardization
- d) Direct Standardization
- e) Compare number of deaths

Age group	Numbers of workers in the company	Observed deaths in the company	Population of Jordan	Number of deaths in Jordan	Age-specific death rate in Jordan
20-29	500	2	1,000,000	3,000	0.003
30-39	700	4	900,000	2,700	0.003
40-49	600	3	800,000	4,000	0.005
50-59	400	5	400,000	6,000	0.015
60+	200	7	200,000	10,000	0.05
Total	2400	21	3,300,000	24,700	

Answer: c; Although we can calculate specific-age death rates of the company workers, we used indirect standardization because the company is considered a small population

A screening test was conducted on a group of individuals to detect hyperglycemia. The test results yielded the following data:

SEE THIS TABLE FOR THE NEXT 2 QUESTIONS

	Positive Screening Test	Negative Screening Test
Disease present	1400	100
Disease absent	1000	17500

Q: According to the previous table, calculate False Positive Rate:

- a) 96.6%
- b) 65%
- c) 42.8%
- d) 5.4%
- e) 1.2%

Answer: d

Q: According to the previous table, calculate Positive Predictive Value (PPV):

- a) 93%
- b) 58%
- c) 14%
- d) 6%
- e) 2%

Answer: b

Q: When comparing two groups, if there is no difference in outcomes between patients detected through screening and those treated after the condition manifests, what type of bias is most likely present?

- a) Lead Time Bias
- b) Volunteer Bias
- c) Length Time Bias
- d) Selection Bias

Answer: a

Q: “Where the data collator presses the collector to report even the absence of cases”.

Which type of surveillance does this definition represent?

- a) Active Surveillance
- b) Negative Surveillance
- c) Passive Surveillance
- d) Sentinel Surveillance
- e) None of the above

For any feedback, scan the code or click on it.



Corrections from previous versions:

Versions	Question #	Before Correction	After Correction
V1 → V2			
V2 → V3			