



Study questions

JICA EBM PROMOTION PROJECT 2019

Chapter V

- ❑ What are differences between descriptive and analytical study?
- ❑ If you are to start a life-long research project on an innovative topic, how would you proceed? Please place the study designs in order: ecological study, cross-sectional study, case-control study, cohort study and intervention study.
- ❑ What are differences between prevalence and incidence?
- ❑ What do you think are the reasons behind the high “prevalence” of MS in Vietnam?

Chapter VI

- ❑ Please describe internal and external validity in relation to sampling.
- ❑ Which indicator for occurrence of disease/event can you calculate from the cross-sectional study?
- ❑ Which indicator for association can you calculate from the cross-sectional study?
- ❑ What are the limitations and advantages of the cross-sectional study?

Chapter VII

- ☐ Please describe prospective and retrospective cohort.
- ☐ Which indicator for occurrence of disease/event can you calculate from the cohort study?
- ☐ Which indicator for association can you calculate from the cohort study?
- ☐ What are the limitations and advantages of the cohort study?

Chapter VIII

- ❑ Please list different types of control selection.
- ❑ Which indicator for occurrence of disease/event can you calculate from the case-control study?
- ❑ Which indicator for association can you calculate from the case-control study?
- ❑ What does it mean when the indicator is 1, over 1 or under 1?
- ❑ What are the limitations and advantages of the case-control study?

Chapter IX

- ❑ Please define randomization, placebo and double blinding/masking.
- ❑ Why do you need a control group in the intervention study?
- ❑ What is intention-to-treat in the analysis of RCT data? Please describe by using the word “compliance”.

Chapter X

- Please list and explain three main summary measures.
- Please describe meaning of p-value and 95%CI in your own words.

Chapter XI

- ❑ When you have BP data from residents in two cities ($n=1000$ in each city), which statistical test would you use and why?
- ❑ When you want to estimate fetal weight with several maternal measures, which statistical test would you use? All indicators in this study are continuous. Hint: correlation or regression (not in the chapter)
- ❑ When you want to screen for a disease with an extremely high mortality, would you select a test with a higher sensitivity or specificity? Why?
- ❑ When you want to screen for a disease which you can only diagnose by using an invasive biopsy, would you select a test with a higher sensitivity or specificity?