



The IIHMR University, Jaipur

Institute of Health Management Research

MBA Pharmaceutical Management (2014-2016)

Essentials of Pharmacoepidemiology

M. Marks: 70

Duration: 3 hrs

Note: Attempt any five questions. All questions carry equal marks.

-
- Q.1 Describe the Study designs types in Pharmacoepidemiology studies. (14)
- Q.2 a) Describe Pharmacovigilance and its usages in drug utilization. (7)
b) Describe uses of Pharmacoeconomics of "drug pricing". (7)
- Q.3 Describe following terms (any seven): (2X7)
- | | | | |
|--------------------------------|------------------------|---------|-------------|
| a) p value | b) Confidence interval | c) PSUR | d) PEM |
| e) Randomization | f) Sources of PE Data | g) SAE | h) Biasness |
| i) Process of drug development | | | |
- Q.4 a) Solve the problem and find: Incidence Rate, Relative Risk, and Attributable Risk (per 100 persons)
- In a cohort study on a population of 2433 the no. of person eating fish almost daily are 802, out of which 23 are found to be having stroke, while 82 stroke case are found in persons not eating fish. (7)
- b) After a dinner attended by 100 people, 12 individuals become ill. All 100 people are interviewed about their food consumption at the dinner. The interviews show that 8 of the 12 people who are ill and 25 of the 88 who are healthy ate fish. Find Incidence rate, attack rate and relative risk. (Per 100 persons) (7)
- Q.5 After a dinner attended by 200 people, 12 individuals become ill. All 200 people are interviewed about their food consumption at the dinner. The interviews show that 8 of the 12 people who are ill and 25 of the 188 who are healthy ate fish. Find Incidence rate, attack rate and relative risk. (Per 100 persons)
- Find: Control event rate (CER), Experimental event rate (EER), Absolute risk reduction (ARR), Relative risk reduction (RRR), Number needed to treat (NNT), Number needed to harm (NNH), Odds ratio, Risk Ratio (14)

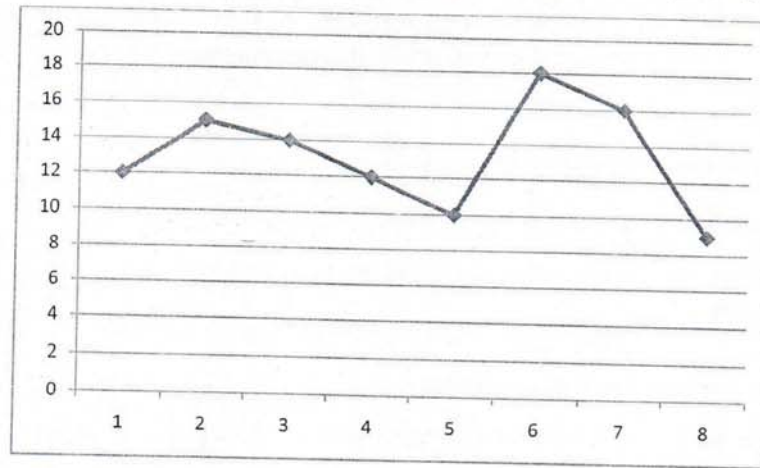
Q.6

Part I

Cases of Cancer is found in 50 out of 70 persons with cigarette while without cigarette is 15 out of 70 Calculate: Prevalence, Sensitivity, Specificity, PPV, NPV (7)

Part II

Define 95% CI and calculate it with below mentioned chart. (For 95% CI $Z_{\alpha/2} = 1.96$) (7)



Q.7

In College, 150 students are assessed for diabetes and found to be having prevalence of 5% using Glucose-stick method (with Sensitivity 70% and specificity 80%). All students who are labeled as positive are forwarded to Diagnostic lab for GTT with sensitivity 95% and specificity 95%. (14)

- Find no. of students labeled as positive by Glucose-stick method.
- Find no. of student labeled positive by GTT
- Net sensitivity of both examinations
- Net specificity of both examinations
- PPV of Glucose-stick method
- NPV of GTT
- No. of students examined by both tests.