Epi 3 Check on Learning (COL) Quiz

COL quizzes are *NOT* intended to be extremely challenging. Rather, the goal of COL quizzes are to simply assess students’ basic comprehension of the assigned materials and provide them with feedback early and without high stakes.

| **Q1 Matching terms**  Match the following terms to their correct definitions. | |
| --- | --- |
| The ability of the test to distinguish who has the disease and who does not | Validity |
| The extent to which the results obtained by a test are replicated if the test is repeated | Reliability |
| The ability of the test to identify correctly those have the disease or outcome of interest | Sensitivity |
| The ability of a test to identify correctly those who do not have the disease or outcome of interest | Specificity |

See definitions on page 135 of Szklo and Nieto 4th edition

| **Q2 Selection bias in RCTs**  Selection bias can arise in randomized experiments. | |
| --- | --- |
| X | True |
|  | False |

This is discussed by Miguel Hernan in *lesson 3: selection bias, video 2: definition of structural bias*.

| **Q3 Differential loss to follow-up**  Which of the following is not true for *differential loss to follow-up*? | |
| --- | --- |
|  | It is a form of selection bias |
|  | It is typically related to bias in cohort studies |
| X | The differences can occur in either exposure or outcome for the bias to occur |

Reference: Chapter 4 pg 134

Explanation: This form of bias occurs when those who remain in the study differ in a systematic way from those who do not. These differences must be specific to *both* the exposure and the outcome to result in selection bias. If the rate of loss-to-follow-up is *not* different by exposure or outcome status, then selection bias is *not* present in these cohort studies.

| **Q4 Neyman’s bias**  Neyman’s bias, also referred to as prevalence-incidence bias can result in results being skewed such that.. | |
| --- | --- |
|  | Excluding patients who have died from the outcome will make the risk from the exposure look less severe |
|  | Excluding patients who have recovered from the outcome will make the risk from the exposure look more severe |
| X | Both A & B |
|  | Neither A or B |

Bias lecture ppt slide 15

This type of bias results when those who are very sick or very well get excluded from the study so the bias can result in either direction.

| **Q5 Recall bias**  Which of the following is true for Recall bias? Select all correct answers. | |
| --- | --- |
| X | Recall bias is a type of information bias resulting from inaccurate recall of past exposure |
| X | Errors in recall are most likely to result in differential misclassification |
|  | Recall bias is not common in case-control studies |
|  | Recall bias can result from study staff collecting and reporting inaccurate information on participants' exposure and outcome status |

Chapter 4 pages 136-138

Recall bias is most common in case-control studies as cases are often more likely than controls to have a heightened recall of certain exposures, given their current condition. Occasionally in case-control studies, for example, recall bias may be triggered by cases who “ruminate” about the cause of their disease.

Interviewer bias is similar to recall bias, except that it is the *study staff* (e.g., interviewers) who collect and report information about participants’ exposure (and/or outcome) status inaccurately, not the participants themselves.