

NR 503 Midterm Exam

Question 1

Which of the following statements best describe efficacy?

- It is an estimate of the benefit of treatment under ideal conditions
- It is an estimate of the reduction of disease in treated groups

Question 2

A study is conducted for a pharmaceutical agent that has shown promise for reducing heart disease among women. In order to more fully test the agent, an additional study is done restricting the participants to be randomized to those who have a history of hypertension. Which of the following advantages cannot be claimed by the researchers?

- The generalizability of the study is increased

Question 3

What is the main advantage of the randomization of the 168 study participants to one of the two drug treatment groups?

- Reduces the potential for selection bias in allocation of treatment group

Question 4

After entry into the study, patients were first classified into three groups, those who had a previous AMI, those with a first AMI who were at high risk for other cardiovascular diseases such as congestive heart failure, & those with a first AMI who were at low risk for other cardiovascular diseases. Which term best describes the study design?

- Randomized clinical trial with stratified randomization

Question 5

After assignment to treatment group, 77% of those in the placebo group were men, while 80% of those in the drug X group were men. Which statement is most likely to be true?

- Randomization was successful since the investigators did not alter the selection of participants in either group in order to ensure equal percentages of men

Question 6

A preliminary analysis was conducted after 6 months & found that 87% of participants in the placebo

group & 85% of those in the drug X group had taken more than 90% of their prescribed dosages. Which statement best describes this finding?

- The characteristics of patients who failed to comply with the treatment dosages should be assessed as they may differ from those who complied

Question 7

Which of the following statements best describes the reason for conducting the study as a double-blind trial?

- Double blinding ensures that potential biases regarding selection, follow-up, & analysis can be reduced

Question 8

A multicenter double-blind randomized study was carried out to compare the effect of drug X with that of a placebo in patients surviving acute myocardial infarction (AMI). Treatment with the drug started 7 days after infarction in 1,884 patients, 52% of all persons who were evaluated for entry into the study. 945 participants were randomized to treatment with drug X while 939 were assigned to the placebo group. Patients were then followed for 12 months for reinfarction. There were 152 deaths in the placebo group & 98 in the group receiving drug X.

The researchers conclude that treatment with drug X reduces mortality in patients who have had an AMI. The researchers are:

- Correct because the rate of death is decreased in the drug X group

Question 9

The following data come from a study of approaches to smoking cessation. Smokers who want to quit were randomized to one of four groups: control group C who received no intervention assistance, quitting guide group Q who received brochures about how to quit smoking, quitting guide & support group QS who received quitting brochures as well as social support brochures listing benefits of smoking cessation, & telephone support group T who received the brochures & a monthly phone call from a counselor. Participants received mailed surveys at 8, 16, & 24 months after randomization. The results after 2 years are in the table below. Which group had the least success in terms of quitting smoking?

- Group QS

Question 10

The following data come from a study of approaches to smoking cessation. Smokers who want to quit were randomized to one of four groups: control group C who received no intervention assistance, quitting guide group Q who received brochures about how to quit smoking, quitting guide & support group QS who received quitting brochures as well as social support brochures listing benefits of smoking cessation, & telephone support group T who received the brochures & a monthly phone call from a counselor. Participants received mailed surveys at 8, 16, & 24 months after randomization. The results after 2 years are in the table below. What is the main purpose of randomization in this study?

- To avoid assigning more persons who have tried & failed to quit in the past to the control group