

NAME _____

DATE _____

CLINICAL TRIAL DISCUSSION QUESTIONS

A doctor is working on a behavioral intervention for people with noses that grow when they lie.

1. What are some Pros and Cons of using a written survey to learn about people with growing noses?

2. Below are some populations that you might send a survey to ask how the treatment is going. Describe one limitation of the populations you are surveying:
 - a. Everyone who lives in the same state as the researcher.

 - b. The entire roster of all patients enrolled in all clinical trials.

 - c. People who have enrolled in another clinical trial for a different problem.

 - d. All the patients that are seen at the clinic on a single day.

A population can be a group of people that belong because they have similar characteristics, or they can be in a population because they lack a specific feature.

When talking about populations in health care or statistics, there are terms for people or objects that are included when they should not be (False positives) and things that are included when they should not be (False negatives).

Imagine a scenario where an expensive vase was broken in your house. If you did it, but your parent blamed the cat instead, that is a false negative. If you didn't do it, but your parents blamed you, that is a false positive.

	Parent said you did it	Parent said you did NOT do it
You really did break it	They're correct	False negative
You really did not break it	False positive	They're correct

The following examples are representative of a game of Liar's Dice.

False Positive: An example of a false positive is when something is included in a population and does not belong. You called out 4 4's in the liar's dice game, and when the challenge arrived, someone pushed forward their 2's instead of their 4's.

False Negative: An example of a false negative is when something is included in a population and does not belong. You called out 4 4's in the liar's dice game, and when the challenge arrives, someone with 2 4's says they do not have any.

3. Provide two reasons why it is important to know about false positives and negatives concerning a population in a clinical trial?

In the case of the man with the growing nose, if his nose grew, he would be found out by someone quickly, and he would be correctly included in the correct population. But many people do not necessarily know that they belong in a group. If the doctor does not have a way to understand if a person should be included, there can be consequences for either not being included in a group or being included in a group when you do not belong. Describe the consequences in the scenario below.

4. In the Liar's dice, what would happen if you raised the bid and were already over the correct number of dice?

5. What happens if you challenge someone, and they are below the number of dice in the population?

In these two scenarios, you have introduced false results. You either had false positives (identified members of the population that were not affected as affected) or false negatives (identified people who were not affected as affected)

6. In our simple story with the nose that grows if the patient tells a lie, what happens in the case of a false negative?

7. What happens in the case of a false positive?

In either of these cases, the people that ended up in the wrong group will be found out and moved to the correct group.

8. The consequences of false results can be either mild or severe. In the case of the broken vase, which scenario do you think is more severe: being blamed for something you didn't do or not getting blamed for something you did do?

9. Would your answer change if it were something more serious like breaking a law? Provide a rationale for your answer.

