Philosophy 3330 Spring 2021
Reading questions #5
Due Tue, Feb 23

Read Chapter 9 of Jacob Stegenga's *Care and Cure* (available on Blackboard). Then answer the following questions. Your answers should be uploaded in Blackboard.

Group	Outcome	
	Heart attack	no heart attack
Took drug	10	190
Took nothing	20	180

1) Use the table above to answer the following questions:

    1a) What proportion of participants in the experimental group had a heart attack?
    1b) What proportion of participants in the control group had a heart attack?
    1c) What is the relative risk (RR) of taking the drug?
    1d) What is the relative risk reduction (RRR) of taking the drug?
    1e) What is the risk difference of taking the drug?
    1f) How many patients would you have to give the drug to before you could expect that it would prevent one heart attack? (This is the NNT).

2) What is the connection between a p-value and statistical significance? In the above case, assume that our null hypothesis is "this drug makes no difference." Now imagine I do some statistics and tell you that p-value of this result is about .08 and thus the result is not statistically significant at the .05 level (this is correct). Which of you the following should you infer:

    2a) Definitely, for sure, we know this drug prevents heart attacks. No question.
    2b) We should reject the null hypothesis. We should believe it does reduce heart attacks. But we don't know for sure. We might be wrong.
    2c) Don't reject the null hypothesis.. But there is some evidence that the drug prevents heart attacks. A little bit. Maybe not too much.
    2d) You have no evidence that the drug reduces heart attacks. But you also have no evidence the other way either. So you have learned basically nothing.
    2e) The result was not significant. So we have some evidence that the drug does not work.
    2f) You need more information to answer this question (what information?)
    2g) Some other answer – (what?)

Explain your answer.

3) After reading the chapter, come up with a question that you want answered or a topic that you would like to be discussed further. This could be something that the chapter forced you think about or it could be something that you thought was particularly confusing in the chapter.