

Epidemiology and biostatistics

*a couple of important notes on the first lecture we took : don't memorize the name of people who came up with definitions for epidemiology.

The history of epidemiology you don't have to memorize the dates, but the chronological sequencing of the events, the end, the start , and John Snow.

Writing Scientific Research Paper

Last time we stopped at slide 9

The consent form we have is a verbal consent(a permission to go and ask people)

Slide 10

Data collection procedure : how are we going to collect the data , give it to the woman and ask her to read the question and fill in the answers(self-administered questionnaire) since in our study we are targeting women who might not know how to read and right , we will be asking the questions and writing the answers our self (interviewer administrated)

Data analysis plan should be clear in the method section before you collect the data (we will use descriptive statistics in our research to get the age , median age, frequency and percentages for every age, percentage of women in the population, higher edu , lower edu, *we will learn more about it later on)in order to explain a relationship between different variables we might use chi square or t test (T test needs continuous variables , which we might not have, but the chi square will be used very simple using software SBSS and the chi square is the easiest thing used to find out relationship , these things we will take them later)chi square gives us the that P-value is less than 0.05 which means an association does exists between the two variables (we never took p-value but it indicates if there is an association or not)

Slide 11

After what we have done in the statistical analysis in the next section "results" we want to present our findings (what did we find, and present it on paper) ,

Objectively : means we don't want our opinion here, only present our findings, what the percentage, the results of chi square test . no subjective opinion or explanation , just numbers, because that will be done in the discussion section.

Some people might have large number of data, and include it in the results , but they have nothing to do with the research question, we only need to present data answering the research question.

Depending on information , choose the best way to represent the data, Mostly we will be using tables in our research.

Slide 12

The results you will have a table and a paragraph; written text that describes the most important findings, that we have in this table. The table should include all the information, very clear, self-explanatory. Every table will be associated with a small paragraph that describes (not everything in the table) only the most important findings in the table, we write them as small paragraphs. Always refer to the table later on in the text. In the results section each small paragraph has to have a table after it.

In the paragraph try not to mention the numbers but instead percentages. (e.g; number of people with the disease 45, try avoiding that, instead write 45%)

Slide 13

Never write a number at the beginning of the sentence instead it should be spelled out. e.g; eighty five percent of people have X, not 85% people have X. you can also write it this way "around 85% of people have X" so include a word before it.

Simplest statistical analysis percentages, numbers, and frequencies, we start by them then use more complicated studies.

We always start our study with a hypothesis and we always have in mind that we will have a significant association, but in many times after analytical analysis we end up with no association between two variables, we were hoping that we will detect an association, so we got negative results (no association, opposite of what we were expecting) some people would not accept that result, they would go back to their numbers, change them to have different results, but that is wrong, never do it.

Negative results doesn't mean something bad, it is considered a result, many other researchers are looking to prove that there is no association, so it is variable for many other researchers, so it is an important finding, though it doesn't support your hypothesis.

Slide 14

Every table should have a number and a title(a descriptive title, that it would describe the content of the table in a good way)

Tables have the title above them, any other way to represent data the title will be below them.

Slide 15

In the discussion section we explain our interpretation, how do we explain all the relationships we have found, all the numbers we have detected, why such numbers are high, others are low. We start this section by restating our hypothesis, to remind the reader of our research hypothesis or question, And give them the answer I have found(association or not)

Then compare the results we have, with the results from previous studies, if there is similarity or not, and explain the differences, whether the sample is different, the place we took the sample etc.. we compare with researches in Jordan , then region, finally international. Opposite from the order in the literature.

Specific to general : from the question we want to answer to general things we want to discuss.

Slide 16

Each research have limitation , without them I would have better results. (e.g choosing sample, conducting the study) you have to mention these limitation. So criticize your work before other people do. So you mention that you have done some mistakes and recommend ways to avoid them in the future, so that other learn from your experience. (avoid praising yourself, and how good your research was)

Implications : how I can utilize these findings in order to make things better in the future, how can I benefit from these results , apply them to make some changes, prevent diseases etc..

Slide 17

Recommendations : for future researches , after I have done this research , some areas have not been researched fully and need to do more research in them, from your experience and working on this topic.

Conclusion paragraph wraps up everything in a really brief way.

References arranged alphabetically in authors names(APA)

Slide 18

She mention it in section one , that she didn't give it to all the sections so it's not included.

Sorry for any mistake

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