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Literature Review

In this lecture we are going to talk about literature review; its definition, importance and how to write it.

Literature review is a process of examining an <u>extensive</u> number of researches and theoretical resources to generate a picture about what is known and not known about a clinical problem (I.e. The topic you are going to study). Types of literature include empirical and theoretical literature.

1- Empirical literature: mostly the publications in peer-reviewed journals and PhD theses.
2- Theoretical literature: includes concept analysis (in research language for example adaptation concept is different from adjustment or coping) that is very helpful when you are doing a research in a new topic making you more concise and scientific. In concept analysis definition of the concept. Similar terms and antagonists should be written and this gives a good impression to the journal you are publishing in that you understand exactly what are you talking about.

Another important thing at your level is theoretical framework in which you show how the variables in your study are related to each other, this can be done in several ways (e.g. connecting variables with continuous lines, causal relationship). So you should put all the variables you are studying in a template or a wide page making these links depending on the sequence of your study.

#Purposes of literature review:

1-Identification of research problem, e.g. if you are studying surgical pain after cardiac surgery your major variables here are pain, cardiac and surgery. In this example your research problem that you are looking for is type, severity or site of pain, so make you more focused on a specific problem limiting the wide results that you may get if you don't specify the exact problem. Your search is either open date search or limited to a specific period of time.

2-Orientation to what is known and not known, this is important especially in your first research about this topic and even when you are an expert researcher in a certain topic this doesn't mean that you know everything about it. Then you should write it in your review mentioning missed information or things that still need to be studied about your research topic.

3-Termination of gaps (inconsistencies) in the body of the research, inconsistency is important as the same point differs in different studies that you reviewed. As a researcher you should be objective having no bias to the idea you support, so that you have to write all results even those that you don't support. Bias may be unintentional.

4-Determination of the need to replicate a study, looking for changes in opinions or attitudes.

5-Identification of clinical interventions that need to be tested as we said we have conceptual operational (how you will measure those studies) at the same time you may benefit from some interventions. Interventions may be an educational program not just a drug or surgery, and they could be adopted in our country if we don't have them so this is an important benefit of literature review.

6-identification of relevant frameworks.

7-Identification of suitable designs and data collecting methods (this will be discussed later), from the review you can say that a certain topic was studied under that type of design so you can build up on that info to choose the design to be used in your research. For example if it was done under descriptive design so you can go for correlational. Also from literature review you can find data collection methods that were used, it will be discussed later but here are some examples to orient you to the topic:

-questionnaires: has a disadvantage of low response rate

- Interview: face to face, accurate due to checking how participants fill the questionnaire, no missing data.

8-Identification of expert who could be a consultant or a resource person. There is a website called "research gait" check if you are interested :P.

9-Assistance in interpreting findings and developing complications, so it help us in the discussion part by comparing our study with other previous studies.

    Sources of information in the literature review:

1-Principal reliance on the primary source this is the information from the author of the article who wrote the results and the discussion in that article not who wrote the literature review or the introduction as the latter only reviewed other people's studies so you can't say that Mamoun who wrote the literature review in that article says blab la … as it is not his own result. Sometimes you can't get to the primary source so you can use secondary source of information but not in more than 10% of your resources.

A students asked about meta-analysis whether it is a secondary source or not and the doctor said although it is a secondary source, it is one of the strongest types of literature review.

2-Less reliance on the secondary source (from one person to the other). Like a summary of other studies.

3-peripheral use of anecdotal reports, opinion articles or case reports which are not sources of evidence based information to support your argument(avoid using them as much as you can).

So now how to start? Search, read and write.

#Steps to search a literature:

    1-Identify the keywords, e.g. site or severity of pain in the example that we talked about in the second page point #1

    2-Identify potential references through electronic (easier) or manual search.

3-promising references, from the titles you can either include or exclude the article in the next filtering steps. Promising means that it may be a useful article and the abstract along with the title give an idea about the article whether it is promising or not.

4-screening references for identifying relevancy and suitability. You can skip this step and go for the next one directly.

5-read relevant references from the abstract.

6-Identifying new references, by looking at the end of each article and this is helpful as you may not get all the results you want due to using of keywords at the beginning of your search limiting the number of results.

7-Organize references

8-Analyze and interpret materials

9-Write

Types of search in electronic data base:

1-Author search (family name) e.g. Smadi

2-Textword search (looking for a keyword within the whole article)

E.g. Cardiothoracic surgery (you will get any article that has this keyword within the whole text)

3-Subject search (looking for a keyword in titles or abstracts of articles)

E.g. Cardiothoracic surgery (you will get any article with a title or an abstract that has this key word)

After writing the literature review you should answer the following questions:

.What is known about this topic.

.Chronological order of the development of knowledge.

.What evidence is lacking or contradictory.

.Consensus or significant debate about this topic showing if there is conflict.

.What are the characteristics of key concepts (i.e. concept analysis)

.relationships between key concepts.

.what problems need to be further tested, at the end of the literature review you have to give the reader this conclusion.

.Contribution that your study will make, here as researcher you should be modest and conservative using humble words for example this study may help in identifying… or this study may give solutions to that problem.

.What is the research design.

#identifying the source of literature and locate it:

-Computer search from the data base; some libraries have CD-ROM (intralibrary as the access is only within the library)

-Searching academic and specialized libraries for unpublished articles and theses.

-Interlibrary search, as in JU we have access to some journals.Common databases for your search include: PubMed and Ovid these may be helpful in finding abstract as you need access to get the full text, and JU provide you with the access to some journals.

#How to write literature review? Introduction, synthesis of empirical literature, synthesis of theoretical literature, summary of what is known and not known and put the reference list that should include any article you used in the text.

#How many articles should be included in the review? This depends on the availability resources, also landmark studies (i.e. study everyone refers to) should be included in the review. You need to read articles till you get the point of saturation that means when you find repeated information at the end of your search. 70% of the references should be recent.

At the end you can judge your writing by self-assessment or by cooperating with other groups for example group A read the review of group B and vice versa.

Final note: literature review is not copying and pasting you should read and write what you understand rephrasing what you read linking the article with each other in your own way.

Good luck :)

This sheet is dedicated to group 26 medicine.

Done by Khaled Smadi

"تلك الجذوة في أعماقك لم تنطفئ.
تلك الشعلة التي اشتعلت لا يمكن لها أن تخبو.
قدرها أن تبقى مشتعلة..هذا جزء منها..."

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