

"How to Prepare an Abstract"

Rebecca P. Winsett, PhD, Associate Professor, University of Tennessee-Memphis, Memphis, TN; Professor, University of Southern Indiana, Evansville, IN, NATCO Research Committee Co-Chair

Your study is completed. Data analysis shows some interesting findings and it's now time to disseminate your results. Are you new at writing a scientific abstract for presentation at a professional meeting or has your abstract been rejected for presentation before and you're a bit skittish?

<u>Number one</u>. You have results from a study that warrants distribution to your professional peers. *Remember that.* It is usually the way that you write up your findings that fail to pass the reviewers' critiques. Let's start with the basics.

- ✓ A scientific abstract is not creative writing. That may sound very simple, but clarity and directness are the keys to presenting your material. Overuse of abbreviations or jargon does not substitute for good writing.
- ✓ Abstracts do not have adverbs that attempt to show importance to the data. The data is the data. Don't use words like, very, quite, extremely.... If you have to use an adverb to describe your findings, then you do not trust what you have found. Let the reader see the importance from the results.

Number two. Follow the directions as outlined in the author guidelines for the meeting.

- ✓ If there are suggested headings, use them.
- ✓ If there is a word limit, stick to it.
- If you are asked to provide objectives and references via a particular format, provide them.
- ✓ If you are asked to state that your study met human subjects' protection, indicate this in the introduction or the section recommended by the author guidelines.

Number three. Think of your audience as well as your reviewers as you construct your abstract.

- Your study may have implications for physicians, social workers, pharmacists, bedside nurses, as well as coordinators. Who will your audience be? Don't be surprised that physicians will not accept an abstract about the psychosocial aspect of your study although that data may be accepted in a scientific meeting that attracts nurses and social workers.
- ✓ The first question the reviewers answer on the critique sheet is "Is the problem/purpose of the study clearly stated?" So take time to clearly state your problem. Construct your purpose statement before you construct your introductory sentence(s). That way your introduction supports your purpose statement and not the other way around. The purpose statement (or research question) is the pivotal piece of your abstract. Your methodology supports your purpose, you present your results based on the question that you ask and your conclusions will also relate back to the purpose statement.

You have read the basics, and now you are ready to develop a scientific abstract. You know the audience, and you have written your purpose statement. Let's take each section of an abstract and examine what should be included.

Introduction/Purpose (use the words suggested in the author guidelines).

This section is for your purpose statement or your research question (Polit & Beck, 2004). Don't let it get lost in verbiage that confuses the audience. For example, if your study examined a type of donor management protocol that differed from the gold standard donor management, and the purpose of your study was to compare number of organs retrieved based on your new management protocol, don't open your abstract with a statement about the shortage of organs, the number of people dying while waiting and that regulatory bodies don't appreciate the impact of everything that you do as a donor coordinator. By the time the reader gets to your purpose statement you have lost them. Be brave, start your abstract with the most important part of the study; the purpose. "The purpose of this study is to examine..." Support that statement with one or two sentences that indicate the need to do this study. If you are asked to include human subjects' protection, then do so unless you did not have your study reviewed by an institutional review board. In that case, don't submit your study for a scientific meeting. You are ethically bound to provide protection for subjects in research studies. If your study underwent institutional review and was approved, you can simply state: "This study met the guidelines for our institution's human subject protection." (NATCO, 2004)

Methods.

Describe the study methodology. Include how the sample was chosen and the procedure that the subjects did to be a part of the study. State the outcome variable(s) and how you measured the outcomes. What instruments were used (reliability and validity are good things to address, but space may not be sufficient to go into detail). You can state that questionnaires X, Y, and Z were obtained that had reliability and validity for the study population. You have addressed it and can give more supportive detail in your presentation. Your study most likely had many outcome variables, but look at your purpose statement. What outcomes do you need to support your purpose statement? Stick to variables that support your purpose statement. Save the others for future abstract submissions. Provide a short description of the analysis plan.

Results.

The results are the meat of your abstract. What did your analyses show? Use the same order in the results section as you stated in your methodology section. Describe your sample. Describe the outcomes based on how you stated them in your methods section. For instance, if you used X,Y, and Z as outcome variables, discuss the results in that order. What differences were found? Again, your study may have had many results, but stick to the results that support your purpose statement. For scientific meetings, it is appropriate to show p values, significant or not. Sometimes a table shows your results clearly, but depending on the submission guidelines you may or may not be able to include a table. For example, some online submission formats are not set up to accept tables or figures.

Conclusion/Implication for practice

In this section indicate the importance of your findings. How did your findings have relevance to other populations, other centers, or to transplantation at large? Don't get too global with your results. It is sufficient to say, with the population in your study, that the differences are important enough to evaluate further or provide an intervention to test it in a larger study.

Once you completed your first draft, do a word count. Where do you need to cut? After a couple of edits, let someone else read and edit it. Writing an abstract takes time and can be particularly challenging if your word count is limited. Three hundred words or less challenges each of us to state clearly and succinctly what the purpose and findings of our study. Remember; describe the purpose of the study, how the study was conducted, what was found and the implication of the findings.

Remember a good abstract is followed by a good manuscript. Turn your oral presentation into a written one.

References:

NATCO. (2004, March 1, 2005). NATCO Call for Abstracts, Case Studies, and Research Grants. from http://www.natco1.org/documents/NATCOcallforabstracts2005 000.pdf

Polit, D. F., & Beck, C. T. (Eds.). (2004). *Nursing research: Principles and methods* (Seventh ed.). Philadelphia: Lippincott Williams & Wilkins.