### Intensive Course in Research Writing

Barbara Gastel, MD, MPH Texas A&M University Summer 2016 Intensive Course in Research Writing: Session 4 (30 June 2016)

# Today

- Guest presentation: giving a 15-minute talk
- Presentation/discussion: writing the results section
- Mini-workshop: results sections
- Presentation/discussion: tables and figures
- Mini-workshop: tables and figures
- Workshop: drafts of methods sections

Guest Presentation: Giving a 15-Minute Talk

#### The Results Section

#### The Results Section

- The core of the paper
- Often includes tables, figures, or both
- Should summarize findings rather than providing data in great detail
- Should present results but not comment on them
- (Note: Some journals, however, combine the Results and the Discussion.)

# Verb Tense for the Results Section: Past Tense

Examples from "Seven-Year Efficacy of RTS,S/AS01 Malaria Vaccine among Young African Children" (published in today's issue of the *New England Journal of Medicine*):

- "Of the 447 children enrolled in the original trial, 312 completed all three extensions of follow-up..."
- "Efficacy was consistently lower in the cohort with high exposure to malaria parasites than in the cohort with low exposure (Table 2)."
- "All cases of severe malaria resolved without long-term sequelae."

# Results Sections of Papers with Tables or Figures

- How much should the information in the text overlap that in the tables and figures?
  - Not extensive overlap
  - In general, text should present only the main points from the tables and figures
  - Perhaps also include a few of the most important data
- Remember to mention each table or figure.
   Do so as soon as readers might want to see it.

# Mentioning Tables and Figures: Some Writing Advice

- In citing tables and figures, emphasize the finding, not the table or figure.
  - Not so good: Table 3 shows that researchers who took this course published twice as many papers per year.
  - Better: Researchers who took this course published twice as many papers per year (Table 3).

## Mini-Workshop: Results Sections

- Look at the instructions to authors from your target journal. What, if anything, does it say about the results section?
- Look at the results section of your model paper.
   Notice items such as the following:
  - Length and organization
  - Wording
  - Inclusion of subheads (or not)
  - Number of tables and figures
- Be ready to discuss your observations.

#### Announcements etc

- For tomorrow
  - Reading due
  - Writing due: revised draft of methods section
  - Optional item: example of poster
- Signup sheets
- Questions

#### Some Resources

- Items on rights and permissions
- SHERPA/ROMEO: Publisher Copyright Policies and Self-Archiving (http://www.sherpa.ac.uk/romeo/index.php)
   "Use this site to find a summary of permissions that are normally given as part of each publisher's copyright transfer agreement."
- OneLook Dictionary Search (<a href="http://www.onelook.com/">http://www.onelook.com/</a>)
   (lets you look up words in multiple dictionaries)

# Tables and Figures: Some Basics

First: What points from the reading on tables and figures might be especially useful to remember?

### **Tables: A Few Suggestions**

- Use tables only if text will not suffice.
- Design tables to be understandable without the text.
- Organize each table in a logical way.
- If a paper includes a series of tables, use the same format for each.
- Be sure to follow the instructions to authors.

## Figures: A Few Suggestions

- Use figures (graphs, diagrams, maps, photographs, etc) only if they will help convey your information.
- Avoid including too much information in one figure.
- Make sure that any lettering will be large enough once published.
- Follow the journal's instructions.

#### **Discussion Question**

 If you have data that could be presented in either a table or a figure, how do you decide which one to use?

### A General Suggestion

- Look at tables and figures in journal articles presenting research similar to yours
  - In your target journal
  - In other good journals
- Use these tables and figures as models when designing your own tables and figures.

### Sources of Further Information

- "Almost Everything You Wanted to Know About Making Tables and Figures," Department of Biology, Bates College
- (http://abacus.bates.edu/~ganderso/biology/resources/writing/HTWtablefigs.html)
- Writing and Publishing Scientific Papers, Part 2 (from China Medical Board course, accessible at <a href="http://www.authoraid.info/en/resources/details/10">http://www.authoraid.info/en/resources/details/10</a>
   65/)

# Mini-Workshop: Tables and Figures

- Look at the instructions to authors from your target journal. What, if anything, do they say about tables and figures?
- Look at the tables and figures in your model paper and any other tables and figures you brought.
  - What are some strengths of these tables and figures?
  - What do you think could have been improved?
  - What other observations or questions do you have?

# Workshop: Drafts of Methods Sections

- Read your group members' methods sections fairly quickly, to get the general meaning.
- Read each methods section more carefully, and write comments on it.
- Discuss each methods section, noting strengths and then providing suggestions.
- Give the commented-on methods sections to the authors.

Wishing you a good afternoon!