



Family Medicine

The Art of Manuscript Writing

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June 22, 2021

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Agenda

- Starting from a Blank Page
- Journal Selection
- Section by Section
- Editing, Phrasing, and Style
- Other Resources

Learning Objectives

- In this session, participants will learn:
 - The basics of getting started on a new manuscript
 - How to select the appropriate journal for your manuscript
 - How to structure and write sections such as the Background and Discussion

Starting from a Blank Page

Headings & Sub-Headings

- Most common headings & subheadings:
 - **Background/Introduction**
 - **Methods** (Design, Setting, Participants, Intervention, Data Collection, Data Analysis, Ethics)
 - **Results/Findings** (Participants, sub-headings for your results)
 - **Discussion** (Limitations, Implications for Future Research)
 - **Conclusion(s)**
- How to figure it out? Think design, methods, journal

The Length Question

- Journal dependent!
- But if you're just working on drafting first, some general standards I follow:
 - Intro: ~1.5 pages double spaced
 - Discussion: ~2 pages double spaced
 - Word count (not including references, tables): ~3500
- If you know your journal:
 - You can try breaking down other similar articles (e.g., look at length, and proportion section by section)

Journal Selection: Planning Where to Submit

Journal Fit: Start with the Journal

- Make a list of journals and check them all out ***use your own references as a good starting point*
- Read the author guidelines – will it (or can it) fit for length, design, topics?
- Check out the About section for further fit info
 - Some may have published commentary about what they are seeking
- Look at other articles the journal has published
 - E.g., Clinical vs. community-based, “big” summaries like SRs vs projects, RCTs vs pilots, qualitative vs quantitative, negative results vs only positive

Journal Selection & Paper Planning with Teams

- Key authors (e.g., PI, first author, key implementer) should definitely give opinions on journal selection
- Give other authors the opportunity to weigh in
- Things that teams may particularly care about:
 - Fit, as described
 - Impact factor
 - Cost of submission
 - Open-access
- Start early and be transparent – a Publication Plan is ideal

Section by Section

Writing the Background & Doing a Lit Review

- Think: problem, gap, hook; end with your objective
- How much is enough literature?
 - It doesn't need to be Systematic Review level for every paper
 - A snapshot of what exists – focus on areas you'll be fleshing out
 - Give *enough* of a picture to identify the gap your research fills (**hint:** directly referencing the gap makes it clear to readers)
- Citing papers? Don't cite from others' referenced Background sections, find the original source
- Consider which lit fits Background vs Discussion

Writing a Discussion

- The basic steps:
 - Go through results and see what stands out – “good” or “bad”
 - Make educated assumptions about what might have happened to lead to those results
 - Compare your results to the existing literature
- Include limitations even if it’s not a distinct subheading requested – consider also strengths and implications for future research

Putting Things in the Right Places

- Keep your outcomes and/or data collection methods in the ***same order*** at every mention
 - Keep an eye out in Data Collection, Data Analysis, Results
- Don't repeat the same info in the Methods, even if it fits in multiple sub-sections (pick one)
- Results vs Discussion?
 - Watch for inclusion of anything verging on assumptions or interpretation being included in Results... except for some qual
- Doubting what to include? Use a checklist (See EQUATOR Network)

Special Notes for Qualitative Results

- Your transcription might not actually be “verbatim”
 - If it isn’t, you can delete filler words (e.g., “like”, “just”, “you know”
 - depends on participant age & cultural groups)
 - If it is, use more ellipses...
- Use actual terms from the quotes in your text if possible – otherwise meaning can get muddled

Tables & Figures

- Use them strategically
- Should be able to stand alone – use the ‘Note’ to make sure they do
- Should not be redundant to the text

Editing, Phrasing, & Style

Different Styles of English

- We've got folks from all over – so pick only one & stick to it!
- Quick and dirty guide:
 - **US** = no U's, Z's over S's, -ER over -RE, no added E's, ends at M (*Color, randomization, theater, aging, program*)
 - **UK** = added U's, S's over Z's, -RE over -ER, added E's, add -ME (*Colour, randomisation, theatre, ageing, programme*)
 - **Canada** = added U's, Z's over S's, -RE over -ER, no added E's, ends at M (*Colour, randomization, theatre, aging, program*)
- But of course, there are exceptions to every rule

Adding Clarity & Accuracy When Editing

- Short forms aren't always clear – if you have space, spell out those acronyms & initialisms
- Make sure the story of your abstract matches the story of your paper
- E.g. = *an* example of, i.e. = *the only* examples of
- Read your paper specifically for language use that isn't sensitive to those outside dominant culture or language that is 'out of date'
 - Even if an article you're referencing uses it, you do not have to

Make the Paper a Good Read

- Academic papers don't have to be boring and dry
 - Make them as readable as you can from top to bottom (working with what you have in subject matter)
- Academic papers don't have to be pretentious
 - If a smaller word does the job as well or better than a big word, use it (e.g., use vs utilize)
 - It's better to be clear than to sound smart
 - Even experts prefer plain language ¹

1. <https://www.nngroup.com/articles/plain-language-experts/>

Other Resources

Sample Papers

- **A clean quantitative program evaluation** → Agarwal, G., Angeles, R., Pirrie, M., Marzanek, F., McLeod, B., Parascandalo, J., et al. (2016). Effectiveness of a community paramedic-led health assessment and education initiative in a seniors' residence building: the Community Health Assessment Program through Emergency Medical Services (CHAP-EMS). *BMC Emergency Medicine*, 17. <https://bmcemergmed.biomedcentral.com/articles/10.1186/s12873-017-0119-4>
- **A thick qualitative evaluation** → Gaber, J., Oliver, D., Valaitis, R., Cleghorn, L., Lamarche, L., Avilla, E., et al. (2020). Experiences of integrating community volunteers as extensions of the primary care team to help support older adults at home: a qualitative study. *BMC Fam Pract*, 21, 92. <https://bmcfampract.biomedcentral.com/articles/10.1186/s12875-020-01165-2>

Other Resources – Internal to DFM/McMaster

- DFM Guidelines for Authorship, based on ICMJE guidelines:
dfmresearch:\Research Projects\Clinic Research Coordinator\Faculty Resources
- May 2018 RKSB on ClinicalTrials.gov and Checklists, in:
dfmresearch\Training and Resources\Knowledge and Skills Builder Sessions\Research Methods and Design
- HSL's Getting Started with Literature Searching:
https://hslmcmaster.libguides.com/literature_searching

Other Resources - External

- Web of Science Journal Search & Manuscript Matcher:
<https://mjl.clarivate.com/home>
- UBC Science Writing Resource:
https://wiki.ubc.ca/images/c/cc/Science_Writing_Resource.pdf
- Tips for Writing an Abstract:
<https://www.stfm.org/media/1711/tipstoimproveabstract.pdf>
- The EQUATOR Network (checklists and more):
<https://www.equator-network.org/>
- Academic Writing, from OWL Purdue Online:
https://owl.purdue.edu/owl/general_writing/academic_writing/index.html
- ICMJE Recommendations for Scholarly Work:
<http://www.icmje.org/recommendations/>

Wrapping Up

ACKNOWLEDGEMENTS: I'd like to give a big thank you to Neha Arora, Erin Beaulieu, Laura Cleghorn, Larkin Lamarche, and Melissa Pirrie for providing extra info, resources, and feedback!

Any Questions?



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