Writing Your Manuscript: Structure and Style

This is the second in a series of articles to help nurses share their knowledge, skills, and insight through writing for publication. Nurses have something important to contribute no matter what their nursing role. This series will help nurses develop good writing habits and sharpen their writing skills. It will take nurses step by step through the publication process, highlighting what gets published and why, how to submit articles and work with editors, and common pitfalls to avoid. For the previous article in this series, see http://bit.ly/2lhnYKJ.

Good scholarly writing is difficult to do and often time consuming. Don't get discouraged when you're starting out. No one sits at a keyboard and hammers out a well-organized, in-depth, engaging article in one or two tries. In this article, I'll outline what constitutes good writing and provide some tips and tools to help you improve your writing skills.

GETTING STARTED

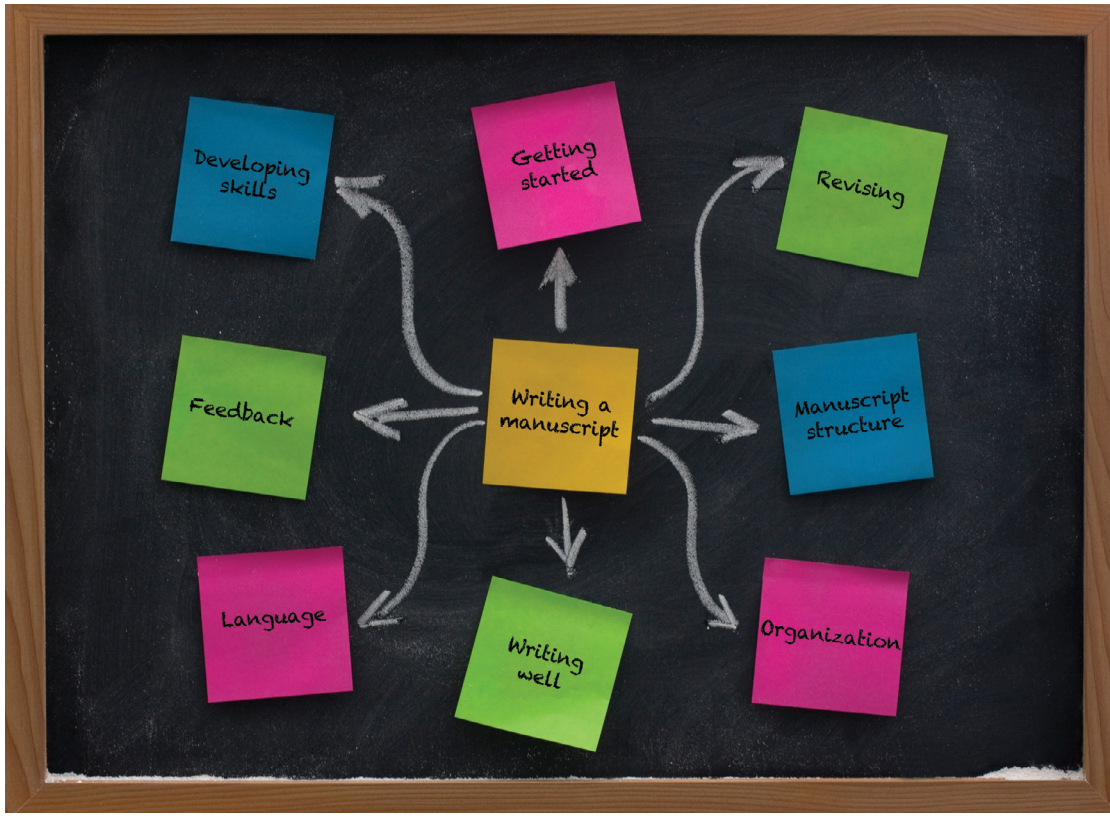
The hardest part of writing a manuscript is getting started. There is nothing more intimidating than a blank page. This is because we believe we have to come up with the right words in the perfect order from the very first sentence. No one does that. Letting go of this expectation is one of the best things you can do for yourself as a writer. Give yourself permission to write a bad first draft. The key is to get something on the page that gives you an entry into the paper. It doesn't have to be good, and you don't even have to start at the beginning. You can start with whatever section of the paper is easiest for you, or with the section you feel most passionate about. Or start by writing random thoughts that you think should be included in the paper. For example, for this article, I had multiple false starts, rambled between ideas, moved passages around, deleted sentences and paragraphs (then cursed myself for deleting some of them), wrote a half dozen sentences that were more appropriate for a motivational speech than for an article, and finally, a few hours in, came up with a rough draft of this article.

Outlining and mind mapping. Creating an outline can help you get started on and organize your paper. If you're writing a research or quality improvement (QI) report, go to the International Committee of Medical Journal Editors (ICMJE) Web site (www.icmje.org) and select "Manuscript Preparation" and then "Preparing for Submission" under the "Recommendations" menu. You can then use the IMRAD (Introduction, Methods, Results, and Discussion) structure described on that page as an outline and fill in the pertinent information under each heading. As you fill in your outline, refer to the detailed guidelines for QI reports on the Standards for Quality Improvement Reporting Excellence (SQUIRE) Web site (www.squire-statement.org) or for research reports on the ICMJE Web site to ensure that all the required information is included and in the correct section of the paper. Write your outline without formatting it as a numbered or bulleted list so you don't spend time reformatting it as you move sections around.

You can also create a mind map—a diagram that presents all the information, ideas, themes, and concepts that need to be included in your article. A visual representation of a complex article can help you figure out how to organize it. A mind map can also be a good brainstorming tool as you plan the content of your paper. There are numerous online resources to help you create a mind map (see *Mind Mapping*).

MANUSCRIPT STRUCTURE

The structure of your manuscript will depend on the type of article you're writing. (The next installment in this series will review different types of articles.) However, research and QI reports, reviews, and clinical papers have a number of components in common. These include the introduction and background, a review of the literature (what is known about the topic), and the discussion and conclusion. Research reports and QI projects also include sections on methodology and results (the IMRAD structure noted above) and systematic and integrative reviews also include the search strategy and a section on critical appraisal of the studies included in the review.



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Before writing your article, or during an early draft, take a look at similar articles published in the journals you're considering submitting to. Although journals also follow established guidelines such as SQUIRE and ICMJE, they vary slightly within these guidelines. For example, some combine the introduction and background sections, and some give limitations its own section rather than including limitations in the discussion section.

Introduction and background. The purpose of the introduction is to establish the significance of the topic or study and to provide background information. In this section, your job is to get the reader to care about the topic. Use strong statements to immediately establish its importance. A common mistake is to "talk around" the topic or provide too much preliminary material before getting to the paper's focus. This can mislead and confuse the reader. Present your topic right away, ideally within the first paragraph.

Include up-to-date epidemiologic data that show how many people are affected by the issue and its consequences. These data may include morbidity and mortality rates, psychological and social sequelae, and the economic costs for the individual and society. Background information should include what the reader needs to know to understand the issue. This may include pathophysiology, history, previous research, related concepts, and the social and cultural context, among other information. Importantly, everything in your introduction should be leading to the purpose statement you make at the end of this section. Keep your purpose statement in front of you as you write, and make sure all the information you provide is directly related to the purpose.

Literature review. A review of the literature is an examination of what is known about the topic as it relates to your purpose. The extent and depth of the literature review varies depending on the paper. (If you're writing a systematic or integrative review, this section includes the results of your review and as such is not covered in this article. For guidance on writing a systematic review, see the *AJN* series *Systematic Reviews, Step by Step*: http://bit.ly/1BPyKnM.)

Don't list, synthesize. The most difficult part of writing a literature review is synthesis; everyone struggles with it. Good synthesis pulls together information from diverse sources, finds connections, and creates an overarching understanding of the material. Don't describe studies one by one when synthesizing. Pull

Mind Mapping

A list of helpful Web sites on mind maps and how to create them.

Coggle
https://coggle.it

Creately
http://creately.com

Bubbl.us
https://bubbl.us

Gliffy
www.gliffy.com

Lucidchart
www.lucidchart.com

Mindmeister
www.mindmeister.com

Popplet
http://popplet.com

out related information from different studies, integrate it, and tell the reader what it means. You will still give examples from specific studies and analyze them, but their meaning will be presented in relation to the overall understanding you have provided.

For example, suppose you're doing a literature review on family presence during resuscitation and you have a section on how clinicians feel about it. You would look to see what each study found in relation to this and then decide what their findings tell us overall. Perhaps some researchers reported that clinicians felt family members got in the way during resuscitation, others found that clinicians' concerns about liability issues affected the way they performed, and one study found that clinicians worried that the family's emotional responses would distract them. In your synthesis you might state that clinicians felt that family presence may adversely affect their performance during resuscitation, discuss the different ways, and then support your statements with details from the individual studies.

Clinical reviews. In a clinical review you probably won't write an extensive literature review—and may not do a literature review at all. Instead, these papers include sections on pathophysiology, signs and symptoms, diagnosis, nursing management, and patient teaching, among others. Though clinical reviews have no formal literature review section, *you must use the most up-to-date evidence* to support your content. Don't rely on textbooks as sources; information should go beyond the basics a reader can get from a textbook.

Methods and data analysis. There is a specific and technical approach to writing the methods and data analysis sections that are outside the scope of this article—other than to say that you must be precise and objective. Do not comment on the findings when you present them. That comes in the next section, the discussion.

Discussion. The discussion is where you tell the reader what your study means and what she or he should do about it. In a clinical paper this section may be called "nursing implications" or "implications for practice." It answers the question: how would nurses use this information in their practice?

In a research paper, the discussion usually begins by restating the purpose of the study and briefly highlighting key findings. The remainder of the discussion is a comparison of your findings with those of prior research. If these are significantly different, you will need to provide potential explanations for the differences. Discuss any unexpected results and provide some explanation for why they occurred. You will cover the same ground in the discussion section of a QI report.

Limitations. For research and QI reports, limitations are usually given in the discussion section, although sometimes they are presented under their own subheading. In this section, you can point out the weaknesses of your study and tell the reader any strategies you used to address them.

Conclusion. The conclusion is your opportunity to leave the reader with a strong message. Succinctly highlight key takeaway points, but don't waste this section with a reiteration of content. Make sure your conclusion is supported by your findings and that it speaks directly to the purpose of the paper.

WRITING WELL

Good scholarly writing has a number of attributes, but chief among them is clarity. Scholarly writing should be so clear that there is no room for misunderstanding. The writing must also be concise. Readers should have all the information they need—and only the information they need—to understand the subject. To write an excellent scholarly article, you need two things: an in-depth understanding of the material and good writing skills. Here I'll discuss how to make choices about language and organization—the two primary elements of good writing in any genre. (Of course, good grammar is also essential, and there are many print and online grammar resources to help with this; see "Becoming a Published Writer," March.)

Language. Clarity requires the use of language that is concrete and specific. The language must also be precise—each word should be carefully chosen to ensure that nuances don't muddle your message. Finally, it must be concise, using the fewest words to clearly communicate the ideas and information.

Use simple language. Too many scholarly articles are weighted down with "academic" language in the form of big words and pretentious phrases. After reading countless articles written like this, many authors think pretension is a requirement of good scholarly writing, that it's how we must write to present ourselves as knowledgeable. However, the opposite is true. The ability to write complex ideas and information in simple, straightforward language demonstrates a deep understanding of the material. Don't be mistaken—simple doesn't mean simplistic. It also doesn't mean avoiding sophisticated or technical language when that's appropriate. See *Straightforward Language* for examples of pretentious words and phrases and possible substitutions. As you can see from these examples, not only is the preferred language simpler, it's also more concise.

Use precise language. Precise language ensures that what you write is understood exactly as you intended. You can accomplish this by using concrete nouns and being as specific as possible. For example, when talking about quantities or size, don't use abstract terms like *the majority*, *many*, or *few* if you know the exact number or percentage. Make sure you know the definition of every word you choose as well as any connotations. For example, *childish* has a negative connotation while *childlike* does not.

Avoid technical jargon. Jargon is specialized language used by a group or profession. Nursing uses a lot of jargon and it can easily slip into your writing. Jargon detracts from clarity because it is exclusionary: those outside the group may not understand it. Jargon can be misunderstood even within a group, because it can vary by regions or specialty.

Use qualifiers sparingly. Qualifiers indicate a lack of certainty. There are times when certainty doesn't exist and using a qualifier is appropriate. For example, when there isn't strong evidence for a statement, you might say it *may* be the case, or when reporting study results you might say something *appears* to be the case. But using qualifiers too often in a paper can make you sound unsure and your writing lack authority. Intensifiers—words that add emphasis—are also best to avoid; they are rarely appropriate in a scholarly paper. Go through your drafts and check for the words listed in *Qualifiers and Intensifiers* and make sure each is warranted.

Avoid redundancy. The biggest threat to a concisely written paper is redundancy. This happens when we repeat ideas, information, or arguments either verbatim or by using different wording. Sometimes it is intentional: we are trying to emphasize an important point so readers will remember it. Don't. Write it clearly and precisely once. Redundancy is more likely to confuse than to clarify.

Another way redundancy enters our work is through word combinations. For example, a common term, one you've probably used, is *absolutely necessary*. But absolutely is part of the definition of necessary, which means "absolutely needed"—so it's unnecessary to add it. Start paying attention to redundant phrases people use when conversing and check for them in your writing. More examples can be found in *Examples of Redundant Phrases*.

Don't overuse adjectives and adverbs. These should be used sparingly in any writing, but especially in scholarly writing where we want to avoid editorializing or dramatizing. Replace adverbs with strong verbs. For example, change *held tightly* to *gripped*, or *quickly moved forward* to *lunged*. Be careful, though, that the meaning matches the strength of the language; do not choose strong words merely for effect.

Straightforward Language

Avoid	Substitute with
subsequent to	after, following
attempt, endeavor	try
possess	have
commence	begin
facilitate	help, assist, ease
incentivize	motivate, stimulate, spur
on a daily basis or on a regular basis	daily or regularly
with the exception of	except
take into consideration	consider
in the event that	if
be of the opinion	think, believe, feel
owing to the fact, in view of the fact	because, since
a large majority of	most
has the capacity of	can
are in agreement	agree
due to the fact that	because

Use the active rather than the passive voice. The active voice is direct, less wordy, and has more energy than the passive voice. In the active voice the subject acts upon the object: *the nurse counseled the patient* rather than *the patient was counseled by the nurse*. The active voice also enhances clarity, because it forces the subject—who's doing the counseling, in this example—to be identified, which might be important. Look through your drafts for sentences where you use the words *be*, *is*, *was*, *were*, *been*, *am*, or *are* followed by a verb ending in *ed*. Usually these indicate you used the passive voice.

It's also OK to use first-person pronouns in scholarly writing. Using first-person pronouns has many advantages, particularly in avoiding the awkward constructions used to circumvent their use. First-person pronouns allow you to construct sentences using the active rather than the passive voice (*We conducted a study* versus *A study was conducted by*), produce prose that is less wordy, and avoid pretentious phrases like *this researcher* and anthropomorphisms (when human characteristics or behaviors are given to nonhuman things), such as *this study determined that*.

Organization. An author is like a travel guide taking readers on a journey: you want the trip to be interesting and smooth. Your readers should always know where they are and where they're going. The way to accomplish this is to write good paragraphs, place them in the right order, and connect them with transitional words or statements.

Paragraphs. Each paragraph should have one main idea and stay focused on that idea. There should be a topic sentence, usually at the beginning, that clearly expresses the main idea. Each subsequent sentence develops the idea in a logical way through the use of analysis, description, examples or data, or other methods. Sometimes, to adequately develop a complex idea, you need to break it into more than one paragraph. Make sure you establish and maintain a coherent order within each paragraph; this may be chronological, cause and effect, by importance, or by listing steps in a process, among others.

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Getting the order right. Complex papers can be difficult to organize effectively; sometimes it's not immediately obvious whether certain concepts are primary or a subset of others. There are a couple of strategies you can use. When starting a paper, use an outline or a mind map. Once you have a first draft, try one of the following methods. Write the main idea of each paragraph in each section on a sticky note and lay these out, moving them around until they're in the best order to tell your story. You can also talk through your paper aloud as if you're telling the story, expressing the main idea in each paragraph in plain language. The sticky note method helps you *see* any gaps, missteps, and redundancies, and the storytelling method helps you *hear* them.

Transitions. One of the best tools we have to guide a reader through a paper is the use of transitions. Transitions prepare readers for changes in focus or ideas, show relationships between ideas, and move the reader smoothly from one paragraph or section to the next.

You are probably familiar with many of the commonly used transition words and phrases, such as

Qualifiers and Intensifiers

Qualifiers	Intensifiers
somewhat	very
sort of	really
may, might	a lot
can, could	quite
some, most, many, few	so
commonly	too
sometimes, usually	ever
probably, possibly	
unlikely	
seems, appears	
basically	
mostly	
virtually	
rather	

therefore, *however*, and *in addition*. Be careful to use the one that best indicates the relationship or connection you mean to establish. For example, *however* is used to establish contrasting ideas, *similarly* to compare those that are alike, and *therefore* to establish an effect. (The Purdue Online Writing Lab presents a comprehensive list of transitional devices and when to use them: https://owl.english.purdue.edu/owl/resource/574/02.)

When shifting focus between paragraphs or sections of a paper, we often need more than a word or phrase to make sure the transition goes smoothly. In that case you need to start the new paragraph with a sentence or two that summarizes what was just covered, prepares readers for what is coming next, and shows them how the two are connected.

REVISIONS AND FEEDBACK

You have to allow enough time for multiple revisions of your paper. Save each draft with a different name or date so you can access a previous version in case you want to restore something that was changed or deleted. It helps to take a short break in between drafts to hit the reset button and come back to your work with a fresh eye. When you get close to the final version, print it out and read it. When you think you have the final version, read it aloud slowly. Reading aloud helps you hear any gaps, awkward constructions, or choppy transitions.

Most importantly, get feedback! When we are immersed in a paper for a period of time we begin to read what we think we wrote instead of what we actually wrote. We also have all the information in our head—we don't realize when we have made assumptions or connections that are not clear to the reader. Ask two people to read your manuscript and give you feedback—one who is an expert in your field and one who knows nothing about the topic. The first can speak to the accuracy and completeness of the information and the second to the clarity of the writing.

DEVELOPING YOUR WRITING SKILLS

The only way to develop your writing skills is to write. A lot. But you also have to read. Reading well-written articles helps you develop an ear for good scholarly writing. Take time to read articles in *AJN* and other quality journals with an eye to how they are written. Note how the authors engage your attention. Did they make a good case in their introduction for the necessity of the article? How did they use transitions to guide you through the article? How did their language choices affect clarity? Did they provide all the information you needed to understand the material? Did they stay focused on their purpose throughout?

Now that you know the basic skills needed to write well, in the next installment I'll review the different types of articles journals publish, and offer tips to increase the likelihood of producing a publishable manuscript. Now, get back to writing! ▼

Examples of Redundant Phrases

- a new initiative
- artificial prosthesis
- close proximity
- each and every
- general consensus
- interact with each other
- interact with one another
- repeat again
- just recently
- sufficient enough
- the reason is because
- first began
- past history
- uniformly consistent

When you think you have the final version, read it aloud slowly. Reading aloud helps you hear any gaps, awkward constructions, or choppy transitions.

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