Chapter 8
Approaching Publication

8.1 Failure to Respond to Reviewers' Comments

The first author has the right to decide what will ultimately be included in the manuscript and how it will be framed. Nevertheless, a first author should respond to every issue raised by a reviewer or co-author. It is acceptable to reject the offered advice. In a scientific environment, co-authors and other reviewers fully expect that some of their advice will be rejected. Indeed, it is important to reject inappropriate or unsound advice. However, if you choose to reject the advice of a reviewer or a co-author, you need to defend that decision when you submit the next draft.

To address every point raised by a reviewer, either change the manuscript accordingly, or explain in a separate note the issues you chose not to change and defend why you chose not to change them. If you simply ignore the advice, you will receive the same comments from the co-author/reviewer again. The paper will not develop further. Both the reviewer and author will feel that their time is being wasted. Often, this situation reflects a communication problem. The reviewer does not understand something that is very clear to the author. Reviewer comments can be an important clue that the author should work to make the narrative more understandable. The key is to respond to every issue raised by a reviewer. Be prepared to continue to revise even after submission to a journal.

8.2 Incomplete Response to External Reviews

When responding to comments, the goal is not to provide a minimalist justification why you wrote what you wrote. Instead, the task is to demonstrate to co-authors, editors, and reviewers that you fully understand the critique and the implication of the critique for your paper. If the reviewer raises a meaningful issue, you need to

S. Luby, D. L. Southern, *The Pathway to Publishing: A Guide to Quantitative Writing in the Health Sciences*, https://doi.org/10.1007/978-3-030-98175-4_8

respond to that critique and revise the manuscript so that other readers do not face similar questions and confusion.

Indeed, this is one of the great benefits of having your work undergo peer review. We should not lament that "the reviewer did not understand our work" or that the reviewer did not see that the current text already addressed their question. If the reviewer did not understand, we should take this as a signal that our message was not written clearly enough to be readily understood and consider what changes we can make to the paper so that future readers will not suffer the same misunderstanding.

It is completely acceptable, indeed expected, to disagree with some points made by a reviewer or co-author, but such disagreement must be framed within the context of a full understanding of their critique. For a manuscript that is resubmitted to a journal, the editor will review the responses carefully and may ask the reviewer(s) to look again at the manuscript and your responses.

8.2.1 Not Including Text of the Manuscript Changes in Response to External Reviewers

In response to external reviews, the author drafts a response document (Sect. 1.3.2). The editor and reviewers should be able to understand this document by reading it beginning to end, without having to simultaneously check the revised manuscript. The response to reviewer document should clarify the specific changes you made in the manuscript as a response to each comment. The manuscript revisions should be included in the response document clearly noted in quotation marks or through other format signaling. These direct quotations from the revised manuscript may be as short as a clarifying restatement of a phrase or a sentence or as long as one or more paragraphs.

If you change the manuscript, but don't make it clear in the response document that you made these changes, then the editor has to go point by point and try to figure out what you changed and what you did not change. This is a painstaking, frustrating, and annoying task. If you want your manuscript to be accepted, avoid annoying the editor. Demonstrate to the editor that you have thoroughly considered and responded to each of these issues. Make it easy for the editor to accept your work.

8.3 Invalid Authorship Line

Inclusion on an author line is an important indicator of one's contribution to scientific work and an important professional credential. The authorship line can sometimes be controversial, so it is important to understand who should be included and who should not. All writers should read the "Recommendations for the Conduct,

Reporting, Editing, and Publication of Scholarly Work in Medical Journals," a document developed by the International Committee of Medical Journal Editors (ICMJE) available at www.icmje.org. Essentially, authorship credit should be based on four criteria with authors meeting each criteria:

- Substantial contributions to the conception or design of the work or the acquisition, analysis, or interpretation of data for the work
- Drafting the work or revising it critically for important intellectual content
- Final approval of the version to be published
- Agreement to be accountable for all aspects of the work and ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

If you follow these guidelines, your choices can be defended in any academic setting. Clarify in your own mind who clearly fulfills the criteria for authorship. Have a separate discussion with your supervisor if you believe that any other person should be included, for example, a government colleague who is critical to the government acting on the manuscript recommendations or an institutional collaborator who is essential to support ongoing scientific collaboration. Know your institutional or program criteria.

Guidance on developing an author line is provided in Sect. 1.2.4, and a tool, the authorship ranking scorecard, for assigning authorship is included in Appendix 8.

This tool helps to clarify who should be included as an author on a paper, and the ordinal ranking of the authors. We recommend that you use this authorship scorecard to share your suggestions for authorship with your primary reviewer when you develop your framing document.

8.4 Retaining Comments in Subsequent Drafts

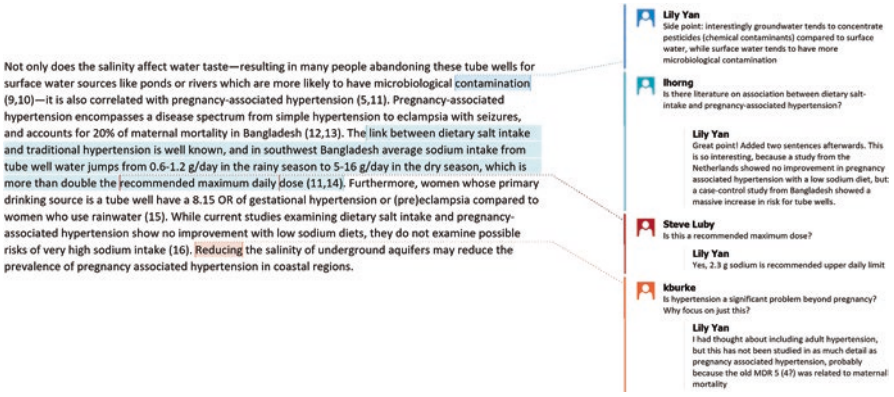
Many co-authors make comments on draft manuscripts using the comment feature of word processors. These can provide useful input to the author. Often, the authors are tempted to respond to comments by continuing the conversation within a series of comment bubbles. The result is the next draft includes two conversations. First is the narrative text. Second is a side conversation among co-authors. Complex drafts that include a lot of historical commentary from multiple reviewers are burdensome and distracting to review.

The goal in drafting a scientific manuscript is a narrative text that is clear and stands on its own. Readers of the published manuscript will not have access to all of the side commentary. The task of a scientific author is to write clearly and strive to address the primary concerns of most readers. Responding in comment form risks Error 8.2.

Retaining a couple of comments that are addressing central issues where there is some appropriate conversation can be helpful, but these should be minimized so that the focus remains on creating a clear text that stands on its own.

If there are a number of comments from co-authors that would benefit from explaining why you did not take certain suggestions (Error 8.1), this is often better communicated by a separate response document. Each co-author can see that their issues were considered, but the main document remains self-explanatory. Alternatively, you can circulate a clean and marked version. The marked version can have detailed responses to comments and show track changes, but the clean document is the working document that presents the draft close to how a new reader would see it.

Example of the Error



Alternative, Better Option

Not only does the salinity affect water taste—resulting in many people abandoning these tube wells for surface water sources like ponds or rivers which are more likely to have microbiological contamination (9,10)—it is also correlated with pregnancy-associated hypertension (5,11). Pregnancy-associated hypertension encompasses a disease spectrum from simple hypertension to eclampsia with seizures, and accounts for 20% of maternal mortality in Bangladesh (12,13). The link between dietary salt intake and traditional hypertension is well known, and in southwest Bangladesh average sodium intake from tube well water jumps from 0.6-1.2 g/day in the rainy season to 5-16 g/day in the dry season, which is more than double the recommended maximum daily dose (11,14). Furthermore, women whose primary drinking source is a tube well have a 8.15 OR of gestational hypertension or (pre)eclampsia compared to women who use rainwater (15). While current studies examining dietary salt intake and pregnancy-associated hypertension show no improvement with low sodium diets, they do not examine possible risks of very high sodium intake (16). Reducing the salinity of underground aquifers may reduce the prevalence of pregnancy associated hypertension in coastal regions.

8.5 Choosing an Inappropriate Journal

It is rarely obvious which journal is best for your article. Many early career scientists request their senior author to recommend the target journal. This approach undercuts the opportunity to learn how to choose a journal. Instead, early career

scientists should consider candidate journals and then propose and defend a prioritized list of journals to their senior author. By considering feedback from their senior author and ultimately their own experience in attempting to publish in various journals, authors can develop and hone their judgment regarding optimal journal choice.

Choosing a journal depends on whom is the best audience for your research question. Explore some journals by reviewing previous issues. Have they published similar studies? Look at the references from an up-to-date manuscript you have found during your literature search. Do you see any journals where this type of paper has been published? Look more closely at journals that have either published work on the topic engaged by your manuscript or published articles using similar methods as your manuscript on analogous topics.

Another consideration is the journal's impact factor. The impact factor is a measure of the frequency that the "average article" published in a given scholarly journal has been cited in a particular year or period. This metric reflects the importance of communication in scientific work. As science is a social activity, articles that are noted and cited by other researchers are influencing the field. This factor is often used to measure or describe the importance of a particular journal to its field. The Institute for Scientific Information ranks, evaluates, and compares journals within subject categories and annually publishes the results in Journal Citation Reports.

The formula to determine impact factor 2020 for a journal would be calculated as follows:

A = the number of times articles published in 2018–19 were cited in indexed journals during 2020
B = the number of articles, reviews, proceedings, or notes published in 2018–19

Impact factor 2020 = A/B

Impact factors can have a controversial influence on the way published scientific research is perceived and evaluated. Criticism of using impact factors as a measure of journal quality include:

- Journal impact factors depend on the research field: High impact factors are more likely in journals covering large areas of basic research and less likely in more subject-specific journals.
- Although Journal Citation Reports include some non-English journals, the index is heavily skewed toward English-language journals, leaving out important international sources.
- Researchers may be more likely to pursue fashionable topics that have a higher likelihood of being published in a high-impact journal than to follow important avenues that may not be as popular.
- Review articles are often highly cited, but they make a different contribution than highly cited original work.

Because there are so many journals today, and because most scholars look for articles using electronic search engines, the impact factor of the journal may be less

important now than it was a generation ago. Many very highly cited articles are published in journals that do not have a particularly high average impact factor. You want to select a journal whose editors will be interested in your work and who are able to identify good peer reviewers. Often, a specialty journal with a somewhat lower impact factor is the best place to reach readers interested in your topic and where journal editors can find high-quality reviewers.

Good reviewers identify important issues for further development in your manuscript. Good reviewers improve your manuscript. Better manuscripts have more influence. If you have results that you and your supervisor believe represent broad scientific interest, it is reasonable to submit it to a more competitive high-impact journal. Recognize, however, that these high-impact journals, for example, the *Lancet*, *Science,* or *Nature,* reject >90% of submitted manuscripts. Each manuscript submission takes time, time that could be deployed in writing your next manuscript.

Consider whether reaching for a high-impact journal for a special manuscript is a good investment of time. Publishing in a high-impact journal could help draw attention to your findings. It might send a useful signal to potential employers about the quality of your scientific work. On the other hand, using your manuscript writing time to prepare your next manuscript can also add to both your scientific contribution and your reputation. Submitting to journals where the type of work that you are submitting is commonly published can save valuable time. For help with finding appropriate journals, explore the website JANE (Appendix 10).

8.6 Not Following a Specific Journal's Details of Style

All journals periodically publish their style rules in a hard copy edition, or these style rules are always available on the journals' website under "Instructions for Authors" or "Requirements for Manuscripts." Go online and read the individual journal's instructions and follow them closely before you submit your manuscript.

8.7 Not Using an Appropriate Reporting Guideline

After your manuscript is published, it will be read, critically appraised, and hopefully will contribute to systematic reviews, inform specific public health guidelines, and influence overall public health practice. Before you submit your paper to a journal, you should consider if you have provided enough details so that the work can be used for these additional purposes.

A number of guidelines have been developed to help to prevent inadequate reporting of research activities. The Strengthening the Reporting of Observational Studies in Epidemiology (**STROBE**) statement is for observational studies, **CONSORT** is for randomized controlled trials, **PRISMA** for systematic reviews with or without meta-analysis or other statistical synthesis methods, and **STARD**

for studies of diagnostic accuracy. A comprehensive list of the available reporting guidelines appropriate for a wide variety of different study types is available at the Enhancing the QUAlity and Transparency Of health Research (EQUATOR) Network library for health research reporting guidelines at https://www.equator-network.org/reporting-guidelines/.

The International Committee of Medical Journal Editors (www.icmje.org) encourages journals to ask authors to follow these guidelines because they help authors describe the study in enough detail for it to be evaluated by editors, reviewers, readers, and other researchers. Some peer-reviewed journals require authors to follow a pertinent guideline.

Researchers should use these guidelines to review their paper to make sure all information is included.

8.8 Exceeding the Journal Word Limit

Exceeding your target journal's word limit for manuscript length, especially for an initial submission, increases the risk that the editor will reject the paper without sending it for external review. The most common form of this error is an author circulating a draft manuscript that is over the journal word limit and then asking co-authors to edit the draft for them.

It is an art to write succinctly, an art that is valuable to cultivate because readers' attention is a scarce resource, and holding readers' attention with your scientific writing is essential for your ideas to influence global scientific discourse.

An initial draft circulated to co-authors may be a little long, but do not circulate a late-stage draft of the manuscript where either the abstract or the body of the manuscript exceeds the specifications of the target journal.

When your manuscript is less than 15–20% over limit, and you've had one or more rounds of input from co-authors, dedicate several hours to reviewing every single sentence and asking yourself, "How can I communicate these ideas clearly with fewer words?" Smile every time you reduce a couple of words, and cheer when you realize you can drop a whole sentence by reorganizing your arguments and dropping some repetition. If you specifically focus on succinct language, you can often markedly reduce word count without eliminating ideas. Focusing on writing succinctly increases the clarity of your scientific reasoning. This laborious task is a first author responsibility.

A version of this error is circulating a draft manuscript with an abstract that is much longer than permitted by your target journal. It is a poor use of your co-author's time to review a draft abstract that is so underdeveloped that you have not addressed the central task of an abstract, which is succinctly summarizing the manuscript within the space and format restrictions of the target journal. We recommend that co-authors refuse to review any abstract that is more than 10% over the word limit. Instead, first authors should exert the effort so that the abstract is a genuine draft abstract formatted for the target journal. An abstract of the appropriate length

and format respects co-authors' time and encourages focused and useful suggestions.

8.9 Asking Your Senior Author to Recommend Reviewers

Many journals request that authors recommend reviewers at the time of manuscript submission. This assists editors because authors are in a good position to identify people who are expert in the area of their submitted work. If an early career author asks a senior author for a list of potential reviewers, then he/she undermines the opportunity to learn how to select reviewers.

A good reviewer is someone who would be interested in your work and has published work that is closely enough related that he or she would have an informed opinion. A good place to begin is considering the authors of the references cited within your manuscript. Also conduct some brief literature searches, and review abstracts to identify other potential candidates. When considering subject matter to search, consider not only the central subject of your manuscript but also related subjects or authors who have reported work using a similar method.

More senior scientists will have more requests for reviews and so will likely decline to review a larger proportion of review requests. Scientists who have very recently published in a related subject area may be particularly interested in providing a review.

Draw up a list of reviewers, provide a reason for selecting each reviewer, and then ask for input from your senior author. This way, you will both generate a reasonable list of reviewers and have gained experience to help you select reviewers for future articles.

8.10 Responding to Journal Reviewers Using the First Person Singular

In group-authored papers, the manuscript is the product of the work of the group. All authors agree to publically defend what is written. Similarly, the response to reviewers is not only what the author who drafted the response is saying; it is a statement from all authors. Once you have responded to external reviews, you should provide all co-authors a 1-week opportunity to review those comments and make any suggestions. (Early career authors should first have their senior author review the response to reviewers before circulating to all authors.) Because the responses to reviewers reflect the combined responses of all authors, the first person singular "I" should not be used in the response document.

Examples of the error		Alternative, better options	
✗	I have revised the related text to provide the details of the selection process of the informants.	✓	We have revised the related text to provide the details of the selection process of the informants.
✗	I have tried my best to address all of your major and minor comments.	✓	We have addressed each of the comments.

8.11 Missing Acknowledgment Section

Many research organizations and academic institutions have a specific policy, template, and language for acknowledging the financial or material assistance from the agency or government that funded your research. Check your institution's policy. Confirm the donor's grant number by reviewing the contract. Government donors often require a statement that the conclusions of the article are the authors' own and should not be construed as official government policy. Clarify from the donor the specific language that they prefer.

People who contributed to the study, but do not fulfill the criteria for co-authorship, should be listed in the acknowledgment section. These may include:

- Community members of the study site
- Data collectors
- Laboratory support
- Administrative support
- Statistical assistance
- Writing assistance

Look at examples of the acknowledgment section from the journal you are planning to submit to. The wording is usually professional in tone. Journals commonly require that anyone listed by name in the acknowledgment section must agree to have their name listed. If you want to acknowledge a person by name, send an email requesting permission to list his/her contribution in the acknowledgments section. If he/she responds affirmatively, simply save the email in case a question is raised by the journal editor.

8.12 Reusing an Email Thread when Circulating a Revised Manuscript

Many email programs organize emails in "threads." As long as people keep responding to the email, the email program will group these emails together. When an author sends a revised version of a manuscript using the thread from their previous draft, they risk generating confusion. A long thread containing multiple drafts requires your co-authors to sort through the thread and try to figure out which is the most recent draft. It can be confusing because co-authors provide feedback on

different drafts. This wastes co-authors time. In the worst case, co-authors dedicate substantial time to reviewing an outdated draft. The solution is straightforward. Each draft should be circulated with a new email thread. Use the subject line to specify draft-specific information. You can generate the addressees by copying and pasting from the email from the prior draft.

8.13 Requesting an Unprofessionally Short Turnaround Time

Asking others to be a co-author is requesting that they assume a substantial responsibility. By affiliating their name with the article, co-authors are accepting accountability for the work. They are publically connecting their reputation to the quality and the veracity of the scientific work, its analysis, and its interpretation. Assuming this responsibility requires careful review of the draft manuscript and ensuring that important issues are resolved prior to submission.

Co-authors are busy. Knowledge workers characteristically have more demands on their time than they have time in a day. When you request that co-authors give time to your article, you should be sensitive to how much of a request this is and so provide a reasonable time for co-authors to respond (Sect. 1.2.5).

In the absence of exceptional extenuating circumstances, asking for a review within a few days communicates a lack of professionalism and a lack of respect to co-authors. It is not a recipe for productive long-term collaboration.

Examples of the error		Alternative, better options	
✗	Attached is the final version of our paper. Please send me your consent to be a co-author by tomorrow so we can proceed with journal submission.	✓	Attached is the most recent version of our paper. I have attempted to address all of the concerns raised by co-authors. I am anxious to proceed with submission. Please look over the draft, and if you concur, please send a statement that you agree to be listed as a co-author and agree with its submission for publication. Of course, any additional suggestions to improve the paper, would be welcome. Please respond by (give specific date; 2 weeks after email is sent).

8.14 Sending Blank Forms for Co-authors to Complete

Journals often require signed forms from co-authors reflecting their contribution to the manuscript, their willingness to be included as a co-author, and declarations of potential conflicts of interest. These forms typically require the name of the manuscript and other details that are the same for all co-authors, but also some information specific for each co-author. Both as a courtesy to your colleagues, as well as to boost team efficiency, before circulating these forms the first author should complete as much of the form as possible so that, for example, each co-author doesn't need to go back through their files and find out what the exact title of the manuscript is.

8.15 Not Providing Co-authors a Copy of the Submitted Manuscript

Co-authored manuscripts reflect the collective work of the whole team of authors. When submitting a manuscript to a journal, most journal websites generate a PDF version of what was actually submitted or allow the submitting author to generate such a document. A copy of this document should be provided to all co-authors so that each has the most up-to-date version of the group's collective work. This way, if questions arise about the article or the analysis prior to publication, co-authors have access to the best collective understanding.

8.16 Not Keeping Co-authors Informed of Discussion with Journal Editors

Co-authored manuscripts reflect the collective work of all the authors. When editors and reviewers raise concerns, this discussion is relevant to the whole co-author team. The best practice is to circulate comments as soon as they are received so that all co-authors can consider them. Next, the first author should respond to each of the critiques and make appropriate changes in the manuscript. Often, there are several iterations of responses to revisions between the first author and the senior author. Once the senior author is satisfied, then the first author should send around the responses and manuscript changes to all co-authors for their input. It is best to give co-authors 1 week to review this. Journals often set deadlines for when responses and revisions need to be returned, so it is best to begin working on these revisions promptly to allow the opportunity for all co-authors to weigh in and improve the collective responses and so the final manuscript.

The exception to this approach is when the editor has asked for only minor changes in style or correction of a couple minor errors. Then it is more efficient to simply respond to the journal and send a copy to all co-authors of the responses and the revised submission.

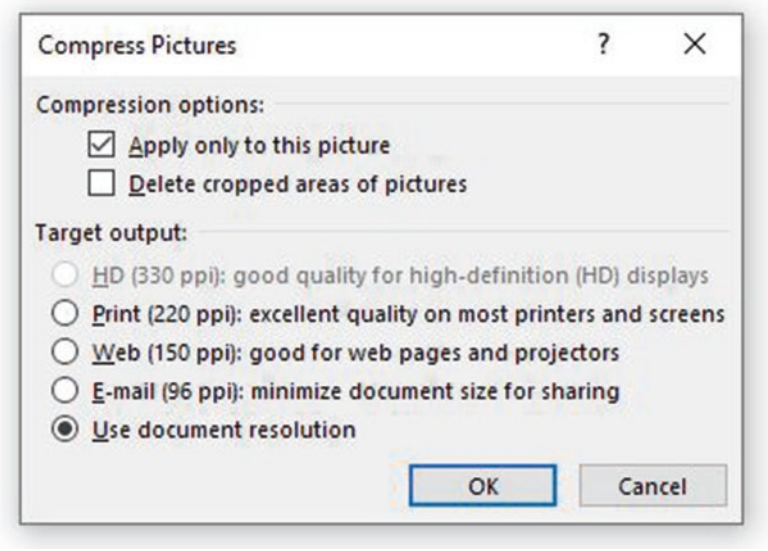
8.17 Emailing Draft Manuscripts with Figures That Are Not Compressed

Figures, especially high-resolution photographs, require a large amount of computer memory. Frequently, a single photograph takes more than five times as much space as all of the text and all of the references in a document. For reviewers, most of this is wasted space. The figure is at a much higher level of resolution than would ever be discernible in publication or is even discernible on the reviewer's computer screens. These large files increase transit times, clog up email, and consume hard

drive space. It is inconsiderate to send these unnecessarily massive files to co-authors for review. Remember, you are asking busy reviewers to give time to provide feedback on your manuscript. Making this as easy as possible generates goodwill from these key stakeholders.

If you use Microsoft Word, you can compress these pictures through the following:

1. Click on the picture.
2. Navigate on the format tab, and click on the Compress Picture icon.
3. This dialog box will appear:



4. Uncheck “Apply only to this picture.”
5. Check “Web” or “Email.”
6. Click on OK.

If you use a different word processor, look on the internet for instructions on how to compress pictures/figures.

Sometimes, statistical analysis software will generate statistically dense outputs in PDF format. These can be dozens or hundreds of megabytes large and take minutes to load. Again, the resolution is beyond what a computer screen can display and what the human eye can discern. A simple solution for Windows users is to use the snipping tool to take an image of the output and paste this into the PDF. Other operating systems have a similar function. This will show the identical detail but not hog resources.

8.18 Not Including Readability Statistics

Scientific articles are more likely to be cited and more likely to influence the world if they are easily understood. A simple way to improve the readability of your manuscript is to use tools that track readability so that you can adjust your prose to make it more understandable. Many word processing software programs include a readability assessment tool that can quickly analyze your draft. Alternatively, several websites offer easy-to-use readability tools. If you open your favorite search engine and enter the phrase "online readability checker," you can choose from several options.

The most common metrics to consider include the following:

1. Average words per sentence should be <25. Strive to be concise.
2. Readability:
   (a) Flesch Reading Ease on a scale of 1–100. A higher number means that the manuscript is easier to read. Strive for >50.
   (a) Flesch-Kincaid Grade level is based on US schools with 19.7 being a professional or PhD level. A lower number means that it is easier to read. Target a grade level of 16–18.