HOW TO WRITE HIGH IMPACT FACTOR PAPER, Step By Step

Oyebayo Ridwan Olaniran (PhD)

Outline

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Introduction: I

- □ Journals are the custodians of scientific endeavor and advancement.
- They aim to publish sound research with enduring conclusions that will stand careful scrutiny and validation.
- □ As such, they are always seeking to publish material that has an impact on the scientific and medical community.

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- □ Key elements of this work are **novelty** and the potential for **stimulating further discussion and research**.
- Producing a high-quality scientific paper requires high-quality research.

Step I: Good research

Doing good research requires:

□ Thorough review and mastering of relevant literature.

□ Asking senior colleagues questions.

Step II: Formulate important research questions?

The basis of any research questions is for it to emanates from **important topic.** Key approach to achieve this includes:

- Choosing an active research area; for example, the presence of COVID-19 antibodies in children that tested negative to COVID-19.
- The relevant research question here could be: What is the prevalence of COVID-19 antibodies in children that tested negative to COVID-19?

Step III: Work in Peer

Think of collaborating with national/international groups. It is beneficial to work in group especially in the areas of:

- Speed
- Accuracy
- Efficiency



Step IV: Formulate Good Study Design

Determine the appropriate study design for your work. It is important to use relevant study design.

- □ The most important aspect of any research study is its *design*. This must be as near perfect as possible from the outset.
- □ If the design is defective, it will be impossible to fix it at the time of writing the manuscript, no matter how perfect your writing skills are.
- □ All editors and reviewers look for the quality of the study design as the first parameter. If defective, the manuscript does not progress further.

- □ As mentioned previously, purely <u>observational studies</u> rarely answer questions of mechanisms definitively.
- In clinical studies like the COVID-19 antibody example, the most appropriate design is the double-blind randomized placebo-controlled parallel group trial design is the most robust.
- □ It is also important to *involve a statistician at the beginning*, *not at the end*, of your study!

Step V: Writing the Manuscript

If you're good with the earlier four stages, you can start writing the manuscript. *Many papers are rejected because most authors begin paper writing here without considering the first four steps discussed.*

The simple secret to successful writing, scientific or otherwise, is that you are telling a story; therefore, it must **make sense**! It must have a **beginning**, a **middle**, and an end with a **"take home"** message. Other scientists reading your paper want to know:

- ✓ what you did?
- ✓ why you did it?
- \checkmark what you discovered? and
- ✓ what you think it means?

Good scientific writing demands clarity, brevity, and logic.

For example, a research topic on investigating the association between COVID-19 prevalence and temperature should be able to answer the following questions:

- ✤ Is there any association between COVID-19 and temperature?
- What type of association is it?
- What is the degree of the association?
- At what point in temperature should we expect zero prevalence of COVID-19?

Contd': Key content

- Each paragraph should be able to stand alone, and yet provide context to what precedes it and what follows it.
- Use simple language and observe the rules of good grammar, spelling, punctuation, and linguistic style.
- □ Avoid any irrelevant information, no matter how strongly you like it.
- Your research may have involved years of hard work and numerous experiments, but the rest of the world does not need to know about these!
- □ Include only the work that is relevant to the main topic of the paper and the scientific questions it is addressing.

Contd': Journal Structure

- Most journals demand a rigid structure and ask authors to adhere to certain conventions.
- You must follow these instructions rigorously to avoid wasting time in endless corrections and communications with the journal editorial staff.
- Thus, it is important to make every effort to produce a nearperfect manuscript the first time around.

Contd': Common Structure

The most common convention for scientific manuscripts follows the format:

- ✓ Introduction,
- ✓ Methods,
- ✓ Results,
- ✓ Discussion,
- ✓ Acknowledgements,
- ✓ References,
- ✓ Tables, and
- ✓ Figures.

Step VI: Tidy Up before submitting

- Sefore you submit your manuscript, it is essential to appreciate that you have only one opportunity to attract the attention of the editor; if this is wasted by careless mistakes or omissions, your chance is lost.
- It is always very helpful to ask a nonspecialist colleague to review your manuscript and comment on readability, typographical errors, grammar, etc.

- More importantly, the colleague would be able to advise you about whether your manuscript is logical and if the story makes sense.
- Serious consideration has to be given to the title of the manuscript, the abstract, and the cover letter to the editor, as explained in the following paragraphs.

Check the title

- The title is the first window for readers to look at your work. Therefore, select a title that catches their attention, accurately describes the contents of your manuscript, and makes people want to read further.
- A good title should be concise, convey the main topics of the research, and highlight the importance of the research findings (i.e., keywords).
- Your challenge is to come up with a title that is not too long (which could be clumsy and annoying) or too short (which could lack crucial selling points about your research).

The best approach is to write down a few possible titles, think about how they describe the content of the manuscript, and select a short list for further refinement. Ask your colleagues to help you.

Check the abstract

- Abstracts represent a guide to the most important parts of your manuscript's written content. Many readers (and editors!) will only read the abstract of your manuscript. Therefore, it has to be able to stand alone.
- What questions should an abstract answer? In its simplest form, your abstract has to address these key questions:
- 1. what was done?
- 2. why did you do it?
- 3. what did you find?
- 4. why are these findings useful and important? and
- 5. what is the "take home" message.

If you follow this simple format, your abstract will be comprehensive and worthy. Make sure you follow the proper journal manuscript formatting guidelines when preparing your abstract and please note that most journals set a word limit of approximately 250 words for abstracts, which is the maximum that would appear on indexing services (e.g., PubMed).

Writing cover letter

- In the cover letter to the editor, your aim is to "sell" your paper to the journal.
- You only have ONE shot at it, so you MUST get it right. Great care should be taken to attract the editor's attention and provide a reason for sending your paper out for external peer review.
- You should avoid careless mistakes (which sadly happen frequently!) such as addressing the letter to the wrong editor or even to the wrong journal!

Tips on writing a good cover letter include:

- > Address the editor-in-chief (EIC) by name.
- > Avoid making a mistake in the name of the editor or the journal!
- Ensure that your letter is not too short or too long and that it does not simply repeat the abstract.
- Highlight the novel aspect of your work and why the journal readership would find this important.
- > Indicate why this work fits the journal's remit and scope.

Choosing Journal

Be honest about the quality of your own work

- Choosing a suitable journal is one of the most important and difficult aspects of publishing scientific work.
- Judging the quality of your own work and where it fits in the hierarchy of scientific journals is not an easy matter and requires considerable skill.
- You should be familiar with your own field and should be up-to-date on what has and has not been published already.
- You should therefore be able to place your work on the novelty scale, the impact scale, and the priority scale.

- High-impact journals want to publish novel findings that have a major impact on the field.
- □ This is what defines high priority.
- They do not want to publish confirmatory studies that simply replicate the first or second published papers.
- You should also be honest about the quality and impact of your work.

To give an example, if your study was presented at an international meeting and was very well received by the audience and chairs, and it generated high-quality questions that were answered expertly, then your work is likely to be of interest to the high-impact journals within your specialty.

Reasons for Instant Rejection!

The most common reason for instant rejection is that the manuscript is inappropriate for the journal (e.g., too basic for a clinical journal, too parochial, or outside the remit of the journal). Other reasons include the following:

Other reasons include the following:

> It lacks novelty.

- > It is a descriptive work rather than a mechanistic work.
- > It poses an uninteresting question that leads nowhere.
- It has a poor or inappropriate study design (e.g., it is underpowered).

Summary and Conclusion

In summary, the process of publishing a manuscript in a highimpact journal starts with:

- ✓ choosing an important question,
- ✓ designing a sound study with statistical power,
- ✓ performing the work with impeccable integrity and attention to detail,
- ✓ writing an excellent manuscript,

 \checkmark submitting it to the right journal,

- ✓ responding to reviewer comments fully, and
- ✓ completing the standard post-acceptance checks.

There is nothing more satisfying than seeing your paper published and visible to the outside world. Hard work pays off and delivers high-quality and enduring and useful progress in human knowledge.

Terima Kasih