

EDITORIAL

Writing Clinical Papers. The Heart of the Matter

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Only through clear and meticulous writing can clinicians transfer the benefit of their research to patients and fellow researchers. It is through comprehensive written articles that clinicians appreciate the concepts being developed, and judge the extent to which results can be applied in their situation. Unfortunately, many submitted manuscripts fall short of achieving the clarity of thought and standards of medical writing required of quality journals. This is partly due to the inappropriate emphasis on published papers as criteria governing, not only professional status, but the appropriateness of a clinician in obtaining academic advancement.

As a reviewer of several medical journals, I am aware of several common errors continually evidenced in submitted manuscripts. The following highlights these and offers guidance to increase the standard of presentation of a well-conducted study, so that it will not be rejected by a journal.

Poorly planned, poorly conducted and poorly presented research are the three commonplace shortfalls found in the submitted articles. A robust paper cannot be predicated on poor study design. A well thought-out, detailed protocol must be completed at the conception stage of the study, and it is frequently apparent to this reviewer, that sufficient time has not been given to this phase of the study.

A writer must scrutinize every aspect of the text to ensure that it conforms to the requirements of the journal to which it will be submitted. Ensure that your paper has a clear research question, and demonstrates an appropriate study design. Always seek statistical advice at the “protocol” stage to ensure the study has sufficient power, and that proper statistical tests will be used.

Keep the title simple and use it to accurately describe the contents of your article. Avoid abbreviations, jargon, formulas and avoid words with little impact, such as “Observations on...”, “Investigation into...”, “Study of...”. Use the title to report the subject of the paper, and not the results. The words in the title should accurately reflect the aims of the paper as stated in a null hypothesis.

Keywords must be chosen carefully; they heighten the visibility of an article, and like the title, will attract, or distract readers.

A common fault lies in composing the “Introduction” by cutting and pasting from a thesis. Do not try to impress the editor, either with the extent of your knowledge, or with superfluous issues. Keep the introduction concise and the contained knowledge relevant to the paper. End with a succinct statement of the aims of the study, and in most cases, a null hypothesis.

The “Material and Methods” section is often the most poorly written part of a paper. Provide sufficient detail, explaining each step of the study clearly and chronologically. For clinical studies list inclusion and exclusion criteria. The notions embodied in the Declaration of Helsinki Publication Ethics should be adhered to by protecting patients' identities, listing any deviation from usual practice or inconvenience or risk imposed on participants, as well as any perceived benefits to participants, patients, and society in general. Specify how written informed consent was obtained and from which committee. Provide information on ethics clearance, and if this was not required, state the name of the committee which decided this. Keep a written letter of all correspondence and opinions of the Ethics Committee, whether this be positive or negative.

The “Results” section is the strength of the paper, presenting, as it does, new knowledge. A frequent error is to introduce discussion elements into the “Results” section. Report the data without discussion, remembering that negative data should be acknowledged to allow satisfactory interpretation of the results. Avoid repetition of data in tables and graphs. Use the SI system (Système International d’Unités) for reporting measurements.

In the “Conclusion” section, state the outcome of the study and the possible clinical implications. Avoid indicating that further research is required. Always declare any conflict of interest, real or perceived.

The journal's instructions to contributors are likely to contain other requirements unique to that journal. Pay strict attention to the journal's “instructions to authors”.

In spite of all these assistances, writing a journal article is a demanding exercise especially for those whose first language is not English. For those who fall into this category, consult a native English speaking colleague before submitting a paper. Additionally, be “open minded” and in your writing, demonstrate that you and your team had no preconceived end-points.

The following are the most common reasons for rejection of a manuscript: poorly written papers; papers with excessive jargon; inadequate description of the study design; confused and contradictory reasoning, indicating a lack of thought and concentration on the part of the authors; essential data omitted or other relevant studies ignored, possibly due to insufficient knowledge of the subject or an inadequate in-depth literature review.¹ Above all, avoid excessive zeal and self-promotion.

Authorship accreditation is a frequently encountered present day issue. Only those who make a substantial contribution to the study conception and design, analyze data, interpret or draft the article, or revise or rewrite it critically before the final version being ready for publishing, should be included. Solely acquiring funding or collecting data does not justify authorship. To avoid conflicts, decide on authorship at the protocol stage.

Avoiding plagiarism is primarily the responsibility of authors. The Council of Science Editors defines plagiarism as “a form of piracy that involves the use of text or other items (figures, images, tables) without permission or acknowledgment of the source of these materials.” The editorial board of the Journal of Cardiovascular Emergencies participates in the CrossCheck System to ensure that published papers are original and trustworthy.

Attention to these issues should enable authors to submit high-quality basic and clinical research, which will integrate clinical and pre-clinical studies, allowing clinicians to transfer the benefit of their research to their patients and to fellow researchers.^{2,3}

REFERENCES

1. International Committee of Medical Journal Editors uniform requirements for manuscripts submitted to biomedical journals. Available from: <http://www.icmje.org>
2. Reporting guidelines for research, at the EQUATOR network resource centre. Available from: <http://www.equator-network.org>
3. The Office of Research Integrity. Available from: <http://ori.hhs.gov/definition-misconduct>