STATEMENT

How to publish your work in a peer-reviewed journal: A short guide

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The basis of a manuscript is the research question, which is reported within a standard publication structure. The 'Background' section clarifies the question. The 'Methods' section describes what was done in the study. The 'Results' section describes the data observed and the analysis of these data. The 'Discussion' section describes how findings of the study relate to current knowledge and the practical implications of the results, and suggests future studies. This structure differs from that of a thesis, the aims of which are broader than reporting on a specific research question.

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Clinicians value learning and scientific progress as embodied in peer-reviewed publications. In addition, institutions of learning prioritise the production of peer-reviewed publications.

Publications that meet scientific standards are needed from all global regions. Regional expertise and insights contribute to global knowledge, and as people travel and countries are increasingly heterogeneous, regional and global issues overlap. Regional experience also adds diversity and creates opportunities for fresh perspectives. Peer-reviewed publications are the authoritative platform where this work can be presented to the wider scientific community.

The aim of these notes is to provide a concise and accessible guide to authors and complement other articles on this topic.[1-6]

The basis of a manuscript is the research question

The research question guides what should be included in an article. Potential authors may have access to an extensive database from which relevant information will need to be selected to address the specific research question. For example, an article dealing with the treatment of advanced disease may make mention of the benefits of early diagnosis and give limited related information, but should maintain its focus on the treatment of advanced disease.

A single main research question is usually addressed in an article, although secondary and related questions may be included.

When an analysis is based on retrospective data, as with a result of an audit, the author needs to define the research question and review the data around the question.

The article needs to have something novel to say on the question. This may be an idea or a perspective that helps to answer the research question.

The structure of the manuscript

The body of the manuscript answers research questions within a standard structure.

'Background'

This section clarifies the research question by describing the background to the study or the basis for the research question, the research question itself and current knowledge, with a focused literature review.

'Methods'

This section describes what was done in the study. It needs to show that the study is objective and not biased and to provide information that will enable others to reproduce the study, if so desired.

This section should be technical and detailed and should clarify the method used, if relevant.

'Results'

This section describes the data observed in the study and the analysis of these data.

Analytical statistics will describe the difference between expected observations and actual observations. Expected observations are based on the premise that there is no change from previous documented findings – 'the null hypothesis'. These findings require clinical insights, contextualisation and interpretation, and cannot be left for a statistician to determine from a spreadsheet of data.

A statistician can be helpful when determining the probability that the actual observations occurred by chance. If that probability of chance is less than 5%, the actual observations are regarded as statistically significantly different from expected observations.

'Discussion'

This section describes the results and interprets what they mean, including how the findings of the study relate to current knowledge and the practical implications of the results. There should be an objective analysis of the strengths and limitations of the study. Suggestions for future work to confirm and strengthen the findings can be given.

The difference between journal articles and theses

Authors of theses often wish to submit them for publication as an article in a peer-reviewed journal. In general, these studies will need to be rewritten to address the specific requirements of a journal article. The differences between journal articles and theses are described in Table 1, which is modified from Thomas and Skinner.[4]

Table 1. Differences between journal articles and theses (modified from Thomas and Skinner[4])

	Journal article	Thesis
Aims	Address research questions and be widely read in the scientific community	Includes showing proficiency in research
Introduction	The background to the research question	Details of related research
Methods	Describe	Discuss the use of methods
Results	Provide the findings relevant to the research question	Report all the results
Discussion	Place the findings in context	Expansive
References	Focused – limit number	Comprehensive

Writing and submitting the manuscript

All cited authors should make a significant contribution to the manuscript. The most important aspect of writing style is to achieve clarity. The journal instructions to authors should be followed closely, and other articles from the same journal should be used as a template. All manuscripts should be meticulously proofread prior to submission.

Authors need to select bona fide academic journals and beware of selecting so-called 'predatory' journals. The purpose of predatory journals is not academic but purely commercial. Bona fide journals are listed in the directory of on-line access journals (https://doaj.org/).

Manuscript review

Manuscripts that are within the scope of a journal will be sent to independent reviewers, and their comments will be fed back to the authors.[6] Authors will not know the identity of the reviewers, and the reviews of many journals are double blind in that the reviewers will not know the identity of the authors. Reviewers perform invaluable work in maintaining academic standards and advising authors. Authors will be requested to respond to the reviewer's questions and comments, but are not bound to follow them if they provide sound evidence for their view.

Conclusions

Peer-reviewed publications explore research questions through a defined structure. They are the authoritative platform through which we advance our professional knowledge. There are numerous opportunities for publications of local clinical data that would advance both local and international medical knowledge and benefit patients.

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