How to write introduction and discussion

ABSTRACT
Scientific writing has a proper format. The anatomical structure or important components of an original article consists of a structured abstract (usually in four sub-headings i.e. objective, methods, results and conclusions with appropriate key words), introduction, methodology, results and discussion. It is summarized by the acronym IMRAD wherein: I stands for Introduction, M for Methods, R for Results, A for And, D for Discussion. This manuscript describes the information which has to be included in the Introduction and Discussion sections of an original article.

Key words: Discussion; IMRAD; introduction; scientific writing

Introduction

Many a times well designed and conducted studies are rejected by medical journals when submitted for publication simply because the authors fail to identify which information has to be included in which section. As such it is extremely important that the authors must be aware of what relevant information has to be included in different sections of the manuscript.1,2

It is essential that the introduction is brief, it should be well referenced. It should provide an outline of the current thinking, identify the gaps which exist in knowledge which the author wishes to fill.3 Some basic requirements for writing introduction include that it is not only short but also arresting. It should tell the readers what to say, is it worth saying. Is it the right format for conveying this message? Tell the readers why you have undertaken to conduct this study. What is already known on this subject and what new information will be added to the medical literature?4

The best introduction should include information from systemic review of work already done before and also demonstrate that what more work needs to be done. The objective is to answer a question and one should undertake the study only if the question cannot be answered from the available literature. After doing proper literature search, select only a few latest studies pertaining to mostly last five years. Make sure that you have read important studies already undertaken on that particular subject and they should be referenced in this section. If there are about twenty five references in the whole manuscript, make sure that four to five or at the most one third of the references are covered in the introduction.

The possible start for an introduction can be an interesting story, vivid description of a scene, using a strong quotation or giving some intriguing facts or making some controversial statements.4 Introduction must also describe the magnitude of the problem which should be followed by brief description of current knowledge and the gap which still exists.5 At the end of the introduction, restate the objective of the study.

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Discussion

While writing discussion, start with a brief summary of your important findings. Then compare your results with local, regional, national and international studies. This is the most important part of a paper hence most of the references will come in this section while comparison is made with other studies. If your findings are similar which have been shown in earlier studies mention that but if they are not similar, it is more important. In that case one should try to find out the reason why your results are different. It is quite likely that there may be some difference in inclusion and exclusion criteria, there could be some cultural differences, differences in dietary pattern etc., Hence, try to find out those reasons and then elaborate that in detail.\textsuperscript{[1]}

Do not repeat what has already been stated in the introduction. Before writing discussion, sort out the important studies which you are going to cite in this section which have some important messages. Highlight what your study has added to the medical literature and how it will help in better understanding of the subject. Point out what further research is needed. Negative findings are more important than positive. If your study has failed to give expected answers, do not try to justify succumbing to the temptation of the desired results. There are some other pitfalls which should be avoided while writing discussion and one of them is do not decide on diagnosis first and then try to fit in them the signs and symptoms.\textsuperscript{[6]}

Convey the message using logical arguments. Make sure that there is continuity and natural flow, no jumps, leading the reader step by step on the way. Most well reputed journals have lot of pressure on limited space available, hence carefully read and follow the instructions which will guide you as regards the length of the manuscript. Most journals have put a word limit on the different categories of the manuscripts. The most important message is always in the beginning of the discussion and at the end. Conclusion at the end of the discussion should carry the take home message. Be honest to tell the readers if the problem has been solved and the study answers the question posted in the objective of the study. Do mention if further studies are needed to confirm your observations, findings.

Limitations of the study should be included in this section under separate sub-heading. Acknowledgments, source of funding, conflict of interest are also covered in this section under sub-headings.\textsuperscript{[3,6]}

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Conflicts of interest
There are no conflicts of interest.

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