

DILEMMA

doi: 10.5455/medarh.2018.72.306-307

MED ARCH. 2018 AUG; 72(4): 306-307

RECEIVED: JUL 08, 2018 | ACCEPTED: AUG 01, 2018

Academy for Medical Sciences of Bosnia and Herzegovina (AMNuBiH), Sarajevo, Bosnia and Herzegovina

Corresponding author: Prof Izet Masic, MD, PhD, FEFMI, FACMI, FIASHI. AMNuBiH, Sarajevo, Bosnia and Herzegovina. ORCID ID: <http://www.orcid.org/0000-0002-9080-5456>. E-mail: izetmasic@gmail.com

How to Write an Efficient Discussion?

Izet Masic

ABSTRACT

Writing of scientific articles requires high competence and scientific awareness, and the respect of scientific patterns of behavior. Every article should essentially be followed by the IMRAD structure, which is generally represented, with minor modifications, in the entire modern scientific publishing. Writing articles must follow the thread, have a meaningful beginning and end, and from each and every part of the context. Also, it is indicate the benefits of the paper, to its defect, defining ambiguous points that would have the process for further analysis in some subsequent studies by the same or another group of authors. It means, the chapter - Discussion represents the heart of every scientific article. The writing of the discussion itself must point to the specificity of the results of the work itself. Author wants to point out the importance of quality description of chapter Discussion, when scientists prepare their articles with presenting own results comparing it with results of other authors with similar topic.

Keywords: IMRAD, Discussion.

Usual way in writing of articles for publishing in biomedical journals is to follow the instructions: – Vancouver’s rules and Uniform Requirements for Manuscripts submitted to Biomedical Journals: Writing and Editing for Biomedical Publication (1, 2). Writing of scientific paper requires high competence and scientific awareness, and the respect of scientific patterns of behavior.

Every paper should essentially be followed by the IMRAD structure, which is generally represented, with minor modifications, in the entire modern scientific publishing. The concept of pointing out that the usual order of sections is contained in the abbreviation “IMRAD”:

- I - Introduction,
- M - Methods (or Methods and Materials),
- R - Results,
- A - and
- D - Discussion and Conclusion.

The abstract does not contain discussion. Although it is a common fact, editors around the world can point out that today is one thing that is not so rare. The idea, pointing to clear goals, setting the hypothesis itself, and conducting the research itself, are important steps in scientific writing. But, the analysis of the results obtained, and the pointing of these results, as well as, comparison with the results of other studies that deal with the same or similar topic requires skill and high expertise in a particular field.

It is very important that when writing the paper itself, the author has a writing style, which differs from the individual to the individual, and essentially reflects the way the author’s thinking.

Clarity, simplicity, briefness, precision and unity are the inevitable features of a scientific style, while the language of writing must be more precise (3). Selection of verb time depends on which results are described. If known, what has already been published, should be in the present time (Introduction and Discussion) and, if described, their own results should be described in the past time (Material and methods), with recommendation to use active instead of passive, except in summary, where the use of passive language is recommended (3).

Writing must follow the thread, have a meaningful beginning and end, and from each and every part of the context, indicate the benefits of the paper, to its defect, defining ambiguous points that would have the process for further analysis in some subsequent studies by the same or another group of authors (1).

The writing of the discussion itself must point to the specificity of the results of the work itself, whether they are going to work with previously published articles or are different. If it is different to point to the details of the statistical processing, or to point to the level of significance

© 2018 Izet Masic

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

that has become, and in some cases to the intensity and significance of the processed method.

It is very important that authors do not repeat the presented results, but it is only necessary to point to those exceptions that do not confirm the rule. It is very important to elaborate the results that are important because they carry the power of an article. The results that are not confirmed by statistical processing should not be in the center of attention (1, 2).

The discussion should essentially address the theoretical and practical consequences of the results, and the conclusions themselves should be presented as briefly and clearly as possible, with individual argumentation. The purpose of the discussion should be the relation between the observed results and the facts (3).

The discussion should not contain historical facts about a phenomenon or topic of writing (those who are not important to the survey itself), should not repeat things that are known to a wider population or which are not at an adequate academic level. A comparison of the results obtained with the research should be done with recognized studies in the reference index databases.

Comparing own results with results from predatory or low-quality journals (primarily a journal in which the papers does not undergo peer review) is contextually meaningless, and it is virtually impossible to get a good result (2).

If only the research has, or may have, a large bias selection, it must be shown, because every original scientific paper is an article that could be included in a meta-analysis or systematic review for the second day so that it may be re-established the repetition of bias, that is, the inability to come to conclusions that could be of great importance in the practice tomorrow.

The discussion must not be too long, it must not be too short.

The discussion must be closely related to the subject matter, must not depart from it, and must be a service. It must not exceed the sum of other parts (Introduction, Material and methods, Results) and must be written in six to seven paragraphs.

Each paragraph should not contain more than two hundred words. Paragraphs can be divided into three types generally (4, 5, 6):

- a) Introductory paragraph,
- b) Intermediate paragraphs,
- c) Concluding paragraph

Sentences should be clear, with no undetermined things that can be accidentally different. Quite quantitatively, each sentence should not exceed 25-30 words (4).

Through long-lasting experience, the recommendation would be to not use the terms in the writing of the discussion, which are closely related to a certain spatiality or subspecialty, because the work itself must be interesting and clear to the general public, which does not mean that the work should not be written in an academic style.

Many authors have addressed the recommendations of writing a certain part of the work, and young researchers must first learn the basics of the writing methodology, because without it will work for sure many defects (7). The shortcomings happen even to the most experienced researchers (2).

A checklist has been developed, which can be helpful to the author when writing the work (CONSORT checklist or STROBE checklist) (1).

For authors who do not come from an English-speaking area, and the work is translated from a less professional person, it is imperative that they themselves participate in the translation of the Discussion, because the translation of the scientific work sometimes knows that it is defective, not as good as the original, and not shows what should be displayed, that is, does not point things out of importance.

The peer review discussions, although the primary reviewers pay the most attention to the methodology of conducting the research and the results, must be very well made, because although many underestimates.

Instead of conclusion we can say the fact is: the Discussion represents the heart of every scientific article.

- **Conflict of interest:** none declared.

REFERENCES

1. Masic I, Kujundzic E. Science Editing in Biomedicine and Humanities. Avicena. Sarajevo. 2013: 272 pp.
2. Masic I. How to Search, Write, Prepare and Publish the Scientific Papers in the Biomedical Journals. Acta Inform Med. 2011; 19(2): 68-79.
3. Silobrcic V. Kako sastaviti, objaviti i ocijeniti znanstveno djelo. Medicinska naklada, Zagreb, 2008. 19-22.
4. Şanlı Ö, Erdem S, Tefik T. How to write a discussion section? Turkish journal of urology. 2013; 39(Suppl 1): 20-24. doi: 10.5152/tud.2013.049.
5. Tompson A. How to write an English medical manuscript that will be published and have impact. Surg Today. 2006; 36: 404-409.
6. Neill US. How to write a scientific masterpiece. The Journal of Clinical Investigation. 2007; 117(12): 3599-3602. doi: 10.1172/JCI34288.
7. Masic I, Begic E, Donev DM, et al. Sarajevo Declaration on Integrity and Visibility of Scholarly Publications. Croat Med J. 2016; 57(6): 527-529. doi:10.3325/cmj.2016.57.527.