

Scientific Paper Writing: Still A Challenging Job?

Prabin Shrestha, MD, PhD

Unit of Neurosurgery, Department of Neuroscience, B & B Hospital, Gwarko, Lalitpur, Nepal

Address for Correspondence:

Prabin Shrestha, MD, PhD

Unit of Neurosurgery, Department of Neuroscience, B & B Hospital, Gwarko, Lalitpur, Nepal

Email: prabinshrestha@hotmail.com

Received, 17 November, 2017

Accepted, 3 December, 2017

Scientific paper writing is a basic and vital task for any professional individuals. It is more so in medical field. Paper writing starts right from the very learning stage and goes on till the end stage of an individual's career or even beyond that. A person's career and his/her contribution to a particular field of society is recognized and appreciated on the basis of scientific papers that he/she has published. Recently in Nepal also, with the emerging of newer medical colleges in bigger cities, paper writing has become not only a compulsion but also a hobby for those who like to study and do research. Moreover, private hospitals are also becoming more and more academic. In this scenario, many scientific journals have also been started in Nepal and one of them is B & B Medical Journal (BBMed), an official journal of B & B Hospital and HRDC.

However, it has been found that paper writing is still a challenging job especially for

beginners. Occasionally even for seniors, who have not published or not used to publish, their paper in international journals, paper writing seems to be troublesome and harassing.

Therefore, this article is dedicated to and mainly aimed at young doctors and residents who have plenty of scope of scientific paper publication in future.

Hints and tips for a good paper writing has been published several times in several journals in order to educate the beginners and authors and to share the idea with others. However, it has been found that paper writing has not yet been perfect enough yet. Many mistakes are still found and paper has to be sent back to author to make necessary corrections. It is tiresome for both the author and editor. In fact, in international journal, the paper has to be written in a perfect way, as per the guidelines, before submission. Even a small mistake will prevent it to enter

the editorial process and the paper will be directly rejected. However, in Nepalese context we tend to make necessary corrections to the utmost level and don't reject the paper as far as possible. In order to avoid this hassle, we are again trying to give few hints to the authors which will definitely prove to be very helpful for paper writing.

General Consideration

Paper writing is not like writing an essay or a story. It has certain rules and regulations. Moreover, each an individual journal has its own format and style. Therefore, before writing a paper for a particular journal, it is mandatory to study the format of that journal thoroughly. This information about the journal can be found under the heading of "instruction to the author" in the website of the journal or in the journal itself. Another way to find it is going through the articles of the previous issue of the journal. Any standard journal is so particular that even placement of comma, full stop, punctuation mark, font style, font size etc must be correct. And this is the responsibility of author. If such mistakes are found, the paper will be returned no matter how good it is. Then comes the responsibility of Editorial board. Editor's job is to review the article how well it is written, does it meet the standard of journal or not, are the statistical tools and analysis correct or not etc. Therefore, anybody who has experience of sending his/her article to such international journals, they understand it clearly beforehand and

write the paper as per the guidelines of that particular journal. Same thing applies to any journal in Nepal and elsewhere.

Any case report or study submitted for publication in any journal should be able to give some message to the readers. Usually the journals have limit of total number of words, references, table and figures etc according to the type of article. That has to be followed while writing and submitting an article to a particular journal.

Following things are few important points to be noted while writing a paper for any journal irrespective of their standard

Authors

Complete name and qualification of all the authors should be mentioned. Similarly institute and address where the study was carried out should be mentioned. In some journal number of authors is also fixed which should not be exceeded. Similarly contact address including email address of the corresponding author should also be clearly written.

Abstract

While writing an abstract, it should include details of the whole study precisely and concisely. Editors can assess the quality of paper just by reading the abstract. It should contain headings as per guidelines. The number of words should be fixed. In most of the journals word count of abstract is limited to 250 words. The number of key words and its order should also be as per guidelines. Abstract should not have any reference quoted. If abstract is not properly written, it

is possible that the paper will be rejected before entering the editorial process.

Abbreviations

Abbreviations should be avoided as far as possible. However, abbreviations following its full form are acceptable in almost all the journals.

Headings

Whether it is a case report or an original article, the whole article is divided into several sections with appropriate headings. If it is a case report, the usual sections and headings are Introduction, Case Report and Discussion. Similarly for an original article, the sections and headings are Introduction, Materials and Methods, Results, Discussion and Conclusion. Within each section, there can be subheadings also. Authors should clearly know and understand what to write under which heading.

Introduction section should contain brief introduction about the subject matter. It may have some references quoted. It should contain the reason for a case to be reported at the end of this section. A common case without obvious diagnostic and therapeutic dilemmas or difficulties may not be eligible for reporting.

Case Report should contain details of the case being reported including clinical features, investigations, diagnosis and treatment. It should contain appropriate figures. Usually this section doesn't have any references quoted.

Materials and Methods should contain details of process of study or research. It

should include objective of study, duration and institution of study, human resources involved if any, types of machineries or tools involved, statistical software and tools used, inclusion and exclusion criteria etc. It should contain appropriate figures. Usually this section doesn't have any references quoted but occasionally can have few.

Results section should contain details of result of study along with figures and tables. Usually this section doesn't have any references quoted.

Discussion section should contain justification of your study. It should not be like introduction section but should contain the points how your study is similar to or different from others, why your study is perfect, why your study deserves publication etc. This portion should contain the summery of all the above headings, comparison of your study with others along with the references to justify your study. Discussion portion may also contain the points of limitations of the study but it shouldn't contain any figure or table. This portion is the most vital portion of the original articles which can be a deciding factor for acceptance or rejection of your article.

Conclusion section should contain few lines of take home messages from the case or study reported. It shouldn't contain any references.

Tables and Figures

Tables and Figures should be appropriately made, each of them should be numbered and appropriate caption should be given. Tables should be made in Excel and should be

submitted as a separated file. Similarly figures must be made either in power point or as a separate picture, JPEG or any other format and should be submitted as a separate file. All the tables and figures must be quoted in the main text of the paper appropriately and serially. Appropriate captions for the tables and figures should be given. Captions should contain brief explanation what exactly the table and/or figure intends to shows. It should not contain details which should, rather, be included under the appropriate heading or section of the article.

References

This is one of the vital parts of paper writing which is often mistaken. Paper is repeatedly sent back to the author to correct it. There are different systems of referencing the articles. One of them is Harvard system in which name of author, date, name of book or journal etc (in abbreviation) are enclosed in parenthesis and embedded in the text. Or the list of full articles that are cited is enclosed in the end of the article. This system is not popular in the journals of medical science. According to another system, the articles cited are numbered and listed serially in order and then they are identified in the text by Arabic numerals. This is called Vancouver system. This is a more popular system in medical journals. The numbering system of articles may be different from journal to journal. This can be according to alphabetical order of the first word of article (a to z) or in order of their first appearance in the text.

Moreover, while listing articles in the

reference section, for every article in the list, there are different systems according to the journal. For example, in case of BBMed, it is written in order of name of authors followed by full stop, title of the article, full stop, name of journal in abbreviation, the year of its publication, semicolon, its issue number, colon and page number at the end with full stop. This proper way has to be followed while writing a scientific paper.

Proper paper writing, not only its content, is the clue to get through any reputed medical journal.

Ethical writing and its misconduct

Any writing in the world, simple story, essay, novel, scientific writing or research work, it has to be ethical and original. It should not be copied from others, it should not contain false data and it should be genuine. Accordingly the newspaper, magazine or journal in which the article is published is rated depending on the standard and quality of article it publishes, frequency of its articles being cited or quoted by others, number of readers etc.

However, many instances of misconducts while writing such articles have been found and have been being detected and observed in present context. Such writing with misconducts are called unethical writings. Few of such misconducts are listed and explained below.

Plagiarism

Plagiarism is defined as "taking over the ideas, methods, or written words of another, without acknowledgment and with the intention that they be taken as the work of the

deceiver" (American Association of University Professors, September/October, 1989). As can be understood from the above definition, plagiarism means copying others' article and making it one's own unethically. The term plagiarism is applied not only in case of written documents but also in verbal presentation and presentation by any other AV (audiovisual) media. "Plagiarism is one of the most serious crimes in academia"(Pechenik, 2001; p.10).

It cannot or would not be a plagiarism if the source of information has been cited and the contributors acknowledged and presented appropriately.

Self Plagiarism

Plagiarism is copying something from others, self-plagiarism is copying something from oneself. Copying something from one's previous study or writing and presenting it again as a new article or notion or a message without citing or acknowledging previous one is called Self Plagiarism. It means duplicating the same article which doesn't have any meaning rather is it a giving a false impression to others.

Salami Slicing

Salami slicing is also called data augmentation or data defragmentation. It means modifying the previous study, one's own or other's, just by adding few items, extra cases, extra data, extra analysis etc but basic data and concept is the same. It also means breaking a bigger study or data into smaller ones and making them multiple papers or articles. However, using the same

cases or data for a totally different purpose is acceptable.

Falsifying

When a totally falls data are used, false statistical tools and results are used such misconduct is called falsifying. This is one of the biggest crimes in the field of scientific paper writing. This misconduct can be found out by communicating with other coauthors. Therefore most of the journals ask for consent from all the coauthors including their contact email addresses.

Text Recycling

It means using the same background, references, methodology, discussion etc, even for a different study or purpose, even with different data, from one study to another by the same author or different. It is also one of the misconducts in the field of scientific writing.

Questionable Citing

Any scientific writing needs basis, evidence and proof, either from one's own study or from others. If the cited references are not reliable, the source of information is not reliable, the reference is manipulated, citing an obsolete data or idea, it can create misconception among the readers.

These days different software are available by which above mentioned misconducts can be properly detected. These software can also detect, percentage wise, how much the article is genuine and how much of misconduct has been made.