Writing for publication

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Writing for publication is never easy. There are, however, ways to keep to a minimum the pain, frustration and wasted time so often associated with scientific writing of either clinical or basic science articles.

First, before putting even one word down on paper, define the purpose of what is to be written. What do you want to say? Why do you want to say it? The criteria for publishability are originality, validity and significance. If any of these three criteria is lacking, don't go any further. It will be a waste of time. This contemplative period prior to actual writing takes time and effort but is an essential prelude to the actual writing.

Second, having assured that all three criteria for publishability can be met, define your audience. To whom are you addressing your message? The answer identifies the journal to which your paper should be sent.

Third, having identified the journal to which the material is to be sent, read and believe in even the smallest detail exactly what the journal's instructions to authors say about the format required. Have your typist do likewise.

Fourth, then, and only then, start writing. This is the first draft. Do not bother with details of style or organization. Just start writing. The first sentence is the hardest, but do not let it serve as a road block or let it even discourage you. Assuming you are writing an article, the best place to start is the introduction. It forces you to put in words what you want to say and why you want to say it. In the introduction do this, nothing more and nothing less. Then describe in the methods how you did what you did. Do so in detail and with clarity sufficient to enable others to duplicate your study. Next, turn to the results. Do not repeat in the text results shown in tables and figures. Do not have results appear in both tables and figures. Clearly indicate which data are statistically significant. Do not refer to trends or trivial differences. A difference, to be a difference, must be statistically significant. Then comes the discussion. This must be a coherent, logically organized consideration of what the results mean and how they compare with similar or comparable studies, not merely a jumbled annotated bibliography. Then, working backwards, write the abstract. By this time you will know what to put in an abstract so that it represents a clear, self-sufficient and complete and, above all, brief description of what was done, why it was done, and what the results mean. The last step of the first draft is the title page. Make the title informative. Avoid non-words ("effect of . . ." etc.). Be realistic about the number of co-authors.

You have now finished the first draft. Leave it alone for at least ten days or two weeks. Don't look at it. Don't think about it. Then come back to it, look at it critically and start the second draft. Count on five or six additional drafts before the paper has been honed to an acceptable level of felicitous style, accuracy in details, internal logic, correct spelling, etc. About the fourth draft, add the references. Limit them to those that are really relevant.

When satisfied that at last you have the final, perfect draft, give, without any words of explanation, a copy to an associate experienced in medical writing who was not involved in the study being described. This person must not only have the time to go over the paper with the same thoroughness that editors and others will but also the ability to tell you quite candidly what is wrong and what needs revision. If this consultant does his/her job, perhaps only one, but more often two, more drafts are needed. Most authors, including experienced ones, require seven to nine drafts before a manuscript has matured to a level where it is ready to be sent to a journal. The process cannot be hurried.

Clinical reports, review articles, letters to the editor, etc., involve the same principles, but with slightly different approaches. These, too, will be discussed, as will additional suggestions for preparation of primary articles outlined above.

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