

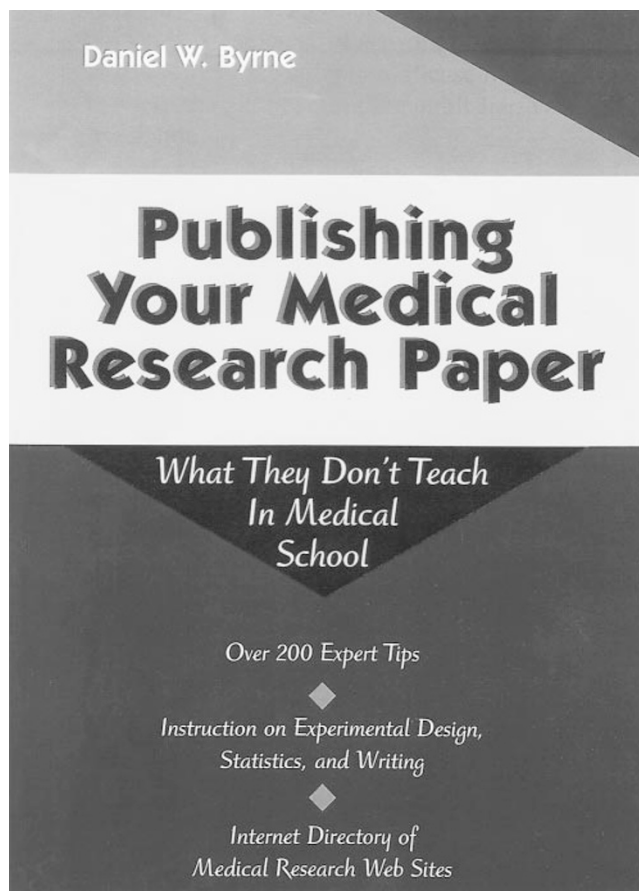


BOOK REVIEW

Publishing Your Medical Research Paper: what they don't teach you in medical school

Daniel W Byrne

*Williams & Wilkins, Baltimore, MD, 1998, 298 pp,
ISBN 0-683-30074-1*



Like drugs, words act as neuro-chemical triggers arousing qualities and states of being when spoken or written. The awareness of how words work can certainly determine the effect our words make; is it coincidence that *grammartye* is the old English word for magic? Yet when it comes to that most critical last step of the scientific process – Putting It Into Writing – many researchers lose their professionalism and start cursing the cursor. Writing a good research article may not be easy, but it does not require any talents that a good

researcher does not already possess. Just like any experiment, there is a protocol.

Daniel W Byrne has taken on the noble cause of providing this protocol with his recently published book *Publishing Your Medical Research Paper: what they don't teach you in medical school*. Recognising the potency of good writing, the author has organised his six fundamental principles into a snappy acronym, POWER: Planning, Observing, Writing, Editing, and Revising. Each principle is broken into short chapters generously peppered with supplemental boxes containing useful checklists, tables, lists of common mistakes, practical tips for improving your English, and pointers to further information from experts, books, and Internet web sites. My favourite box is entitled 'How to avoid annoying an editor'. His book introduces concepts such as journal impact factors, the reviewing and editing process, how to write a covering letter, and the very practical issue of how to deal with the political jockeying for authorship order. The sections are clear and thorough. It is a pleasing book to thumb through and boasts a truly superb format.

Although Byrne has tailored his book for use by clinicians and researchers, he is neither of these professions himself. He is a biostatistician, currently holding a faculty appointment at New York Medical College and running a medical research consulting firm. Predictably, the book's section on statistical analysis methods reflects his expertise and is remarkably strong. He zeroes in on terms that are often misunderstood in a study design, such as incidence and prevalence, and gives useful tips on how to 'groom' your data for more reliable statistical results. Need to review the differences between a categorical variable and a continuous variable? Remember how to apply a Cox proportional-hazards regression? Byrne provides a brisk lexicon of various statistical methods accompanied by clear examples. This section is by no means meant to replace any of the several biostatistic books he recommends; his aim is to provide the reader with a general overview of the strengths and pitfalls of each method that might apply to their study.

The book strives to be its own best example. As background research, Byrne surveyed a number of journal editors, peer reviewers from JAMA, and even

Nobel prize winners. He organises their responses into a series of informative graphs and boxed comments meant to *show* you how you can best present data, not just *tell* you. Lessons gleaned from these responses include common reasons for the outright rejection of an article, and which sections of submitted articles are generally too long. The questionnaires he used are appended. Other appendices include the Uniform Requirements for Manuscripts Submitted to Biomedical Journals (from the International Committee of Medical Journal Editors, 1997), a sample data collection form, the World Medical Association Declaration of Helsinki (amended, 1996), and a 34-page directory of helpful organisations and individuals.

Although generally down-to-earth, some of Byrne's advice is for the socially inept. For example, to form an effective research team he advises 'If you are polite and hardworking, many experts will work with you'. Other words to the wise read 'Say what you mean, mean what you say, but don't say it mean' and 'Introduce yourself and your co-authors to the editor – politely'. Admittedly, we researchers are known for our long hours in the lab grubbily alone, but a horde of editor-abusing barbarians we are not. Byrne is not convinced. He thinks it prudent to provide a few tables of Diplomatic Terms, just in case. Most replacements in these lists are obvious, eg Chairperson *vs* Chairman and pregnancy termination *vs* abortion, but a few are new to me; since when is it pejorative to refer to 'older people' as 'the elderly'?

Perhaps sensitised by Byrne's lessons in diplomacy, one table in this book struck me as amusingly xenopho-

bic. This lists the US spelling for several words (eg hematology) in a column captioned 'preferred usage' and places the British spelling (eg haematology) in the column 'problematic usage'. Undoubtedly most British scientists would find that entire table 'problematic'! Certainly most editors accept either US or British spellings, granted that the spelling remains consistent throughout the manuscript.

Byrne presents a step-by-step approach to producing a quality manuscript. Although certainly geared for the inexperienced, most researchers could pick up one or two tricks from this solid introductory book. Most important topics are covered, although I would like to have seen a detailed comparison of various software programs for organising references, such as Reference Manager or Endnote, which he only mentions in passing. Despite his attention to the many superficial aspects of generating a research paper, Byrne repeatedly stresses the importance of quality in the data, not just in the final paper. He reminds us that in publishing our data, we researchers should try to 'make a contribution to mankind, not just to your *Curriculum Vitae*'.

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