



Journal watch:

Medical writing tips and ‘spin’ in scientific reporting

by Nancy Milligan

Medical writing tips: authorship, methods sections, and common pitfalls with online submission

We start this issue of journal watch with three recent papers from the *Chest* journal’s ‘Medical Writing Tips of the Month’, which has provided advice on a variety of subjects related to the preparation and submission of manuscripts since 2006. Firstly, William M Vollmer tackles the thorny subject of authorship [1]. He starts by highlighting the fact that the pressure to publish can lead to tension over who is included as an author and over the ordering of authorship on the title page of the manuscript. He then goes on to promote the three conditions for authorship as suggested by the ‘Uniform Requirements for Manuscripts Submitted to Biomedical Journals’, i.e. authors must: 1, substantially contribute to the conception and design of the study, the acquisition of the data, or the analysis and interpretation of the data; 2, participate in drafting the article or revising it critically for important intellectual content; and 3, provide final approval of the version to be published [2]. Vollmer argues that, once selected, authors have a responsibility for the text submitted, mainly in ensuring that the study adheres to ethical standards and that the methods and results are fully and honestly reported. To avoid arguments over authorship ordering, Vollmer suggests that a lead or first author is selected before work on the manuscript begins. The lead author should then take responsibility over the order in which the remaining authors are listed based on their individual level of intellectual contribution to the study. Vollmer also touches on the subject of ghost-writing, with a particular emphasis on the distinction between using a ghostwriter (not listed as an author or acknowledged in the manuscript) and a medical writer or technical editor (contribution should be acknowledged) to improve manuscript readability [1].

Secondly, a recent article by MaryAnn Foote offers tips for successfully writing the materials and methods section of manuscripts [3]. Foote compares the process to following a intricate recipe, which must describe precisely the resources used and procedures followed during the study. Materials and methods should often be the longest section of a manuscript, and the golden rule appears to be to provide enough information to enable others to repeat the work. Foote advocates splitting the section into several subheadings (patients, study design, study drugs or interventions, study end points, and statistical analysis) to help guide the writer and the subsequent reviewers. She also

highlights the need to use the past tense to describe methods carried out (e.g. patients *were* randomised to treatment), but the present tense to describe how data are presented (e.g. data *are* summarised by their mean, standard deviation, and range). According to Foote, one of the most common problems is the inappropriate inclusion of results; she suggests an easy solution is making sure what is known at the start of the study is included in the materials and methods section and what is learned during the study is included as results [3].

Finally, Stephen J Welch discusses some of the most common pitfalls encountered that delay or prevent manuscript submission and offers advice on how to avoid them [4]. Briefly, Welch talks about the importance of adhering to word counts (most editors prefer short, clear, and to-the-point articles), ensuring that figures are submitted in the format requested by the journal (often as separate, high-resolution files in specific formats and with a figure legend), clearly stating author financial and other conflicts of interest, declaring that the study has been approved by an institutional review board, and remembering to include a title page, an abstract (formatted according to the journal’s requirements), and cover letter with your submission. Welch also highlights the importance of acknowledging any writing assistance, which is increasingly being added as a specific policy in many biomedical journals [4].

Spin in scientific writing

Although the data should speak for themselves in scientific reporting, it is inevitable that authors’ interests affect to some degree how they report their results. In an interesting article, Fletcher and Black argue that even in the age of protocols, pre-specified end points, reporting guidelines, and a rigorous peer review process, authors’ personal agendas, such as financial, personal, and intellectual conflicts of interest, can affect how research results are presented [5]. The authors point out that “scientific inquiry is not necessarily carried out in a linear, preplanned way”, and that “published reports may be an idealised or even self-serving picture of what was done and found”. Fletcher and Black suggest that this issue is not only important for patient care, but also for the legal decisions that may arise from the research; for example, when expert witnesses are called upon to testify about it. Investigators can shape the way readers interpret their research findings in a variety of ways; for example, by choosing favourable statistical analyses, by selective reporting of successful or ‘attractive’

Journal watch

results, and by glossing over limitations in their study. Fletcher and Black go on to suggest ways in which editors can minimise these types of 'spin', namely to: 1, ensure authors' financial conflicts of interest are published; 2, ask whether authors were restricted (for example, by industry sponsor contracts) in what they could submit for publication; 3, choose suitable reviewers for all of the manuscript's agendas (for example, if the study includes cardiac outcomes, a cardiologist reviewer would be appropriate); 4, be more vigilant with industry-sponsored studies—hold them to a higher standard; 5, do not put the journal in the position where the balance of power in negotiating revisions shifts to the authors; 6, require authors to discuss the limitations of their study; and 7, require registration of

clinical trials. The authors hope that following this advice will lead to the publication of fewer misleading reports [5].

Nancy Milligan

Dianthus Medical Limited
London, UK.
nmilligan@dianthus.co.uk

References

1. Vollmer WM. Responsibilities of authorship. *Chest* 2007;132(6):2042–5.
2. International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. Available at: <http://www.icmje.org/>.
3. Foote M. Materials and methods: a recipe for success. *Chest* 2008;133(1):291–3.
4. Welch SJ. Avoiding common problems during online submission of manuscripts. *Chest* 2007;131(5):1591–4.
5. Fletcher RH, Black B. "Spin" in scientific writing: scientific mischief and legal jeopardy. *Med Law* 2007;26(3):511–25.

EMWA Book Group

We would like to start a book group at EMWA's 2008 Spring conference in Barcelona. To begin with, it will take the form of a discussion table (or tables) during one of the lunch breaks. This is intended to be a recreational activity that we hope will be enjoyable for anyone who wants to join in. We can decide from the level of interest shown in Barcelona, whether it will become a regular feature at the meetings either with a slot in the programme, or as a casual social event. If you want to join in, the books that will be discussed in Barcelona are:

The Constant Gardener by John Le Carre published by Sceptre (2006)

and

The Surgeon of Crowthorne: A Tale of Murder, Madness and the Oxford English Dictionary by Simon Winchester published by Penguin Books Ltd; New Ed edition (1999).

We have suggested one work of fiction and one of non-fiction to try and cater for different tastes. You can find synopses of these books on the Amazon website.

If you would like to recommend a book for future meetings, please let us know. We would like to have a selection of books that have a medical, pharmaceutical or scientific slant that are both a 'good read' and will generate plenty of discussion.

We look forward to seeing you in Barcelona.

Wendy Kingdom

(Info@wendykingdom.com)

Alison McIntosh

(aagmedicalwriting@btinternet.com)

Expensive words

The European Union translation budget is over €1 billion a year or 1% of its entire budget. The Irish language was first spoken in the European Parliament in January 2007. Mary Regan, an Irish journalist with the *Irish Examiner* newspaper, calculated that as the European Parliament meets 4 days per month and there are 783 MEPs, each is allowed to speak for 1 minute per session. Ireland has 12 MEPs of whom 7 may have spoken Irish during the year. Accordingly the amount of Irish spoken in the parliament in 2007 totaled 28 minutes, or 7 seconds per person. The European Union used four fully trained Irish language interpreters during 2007 at a cost of €3.5 million.

Interestingly the European Parliament is able to get by without using all of its 23 official languages, dispensing with such languages as Maltese, Lithuanian, Estonian and Irish, when it meets for its 2-day meetings, which deal with such issues as the rapid reaction force deployment to Chad.

Perhaps the European Union needs a single official language!

Paul Dunne

Ipunne@iol.ie
<http://www.iol.ie>

The pros and cons of whether the EU should introduce one working language are set out at http://www.idebate.org/debatabase/topic_details.php?topicID=288

More information on languages in the EU and the EU's commitment to multilingualism can be found at http://en.wikipedia.org/wiki/Languages_of_the_European_Union