Editorial

Why Write and Publish a Scientific Paper?

¿Por qué escribir y publicar un documento científico?

“Reading maketh a full man, conference a ready man, and writing an exact man” (Francis Bacon)

Starting January 2000, along with Moshe Schein, a well-known prolific and astute writer, and John Fardon, then editor in chief of the British Journal of Surgery, I contributed to a series of articles published in the British Journal of Surgery the first of which was entitled “Why publish?”. I was also co-editor of a book entitled “All you ever wanted to know about (publishing) but never dared to ask”. The first chapter was also entitled: “Why should a surgeon publish?”. Today, 17 years later, the contents of both remain of stream interest.

The immediate goal of medical writing is to transfer (or to diffuse) knowledge in the form of a clear message to the readership, with the ultimate goal of better decision-making in taking care of our patients.

In 2000, we stated that medical writing could be divided into two broad categories, “altruistic” and “egoistic”. In the former we stressed the idea of “dissemination of knowledge, reproducibility, leading to better patient care and research potential, and an aid to decision making”. As for the egoistic or self-satisfying reasons, we laid down “academic and/or professional promotion, being ‘famous’, develop professional contacts, financial gain, and institutional reasons”.

The reasons to publish today have not changed much, but several chapters warrant our attention.

Diffusion of information: Indeed, dissemination of information through scientific writing is a special and specific form of communication, the main goal of which is to get a message (often of interest only to a limited audience), across to an audience, not necessarily in the same field, from the same background, and often with different basic ideas or opinions. The reader must be able to understand the message without any special effort, i.e. the message has to be concise, clear, without ambiguity. Scientific writing must be sufficiently detailed and precise so that the reader can reproduce the same methodology and come up with the same results. If there is sufficient proof of external validity, the reader can extrapolate the results from the paper and apply the results to his or her population. Thus, in our field of surgery, it becomes a tool for medical decision-making, whether for diagnosis, therapy or prognostication. Scientific writing for surgeons also can promote and show “what to do”, “how to do”, “when to do” as well as “why to do”.

Medical writing however, is not a straightforward skill that can be learned in medical school or in our hospitals, most obviously because few “thought” leaders think it necessary to teach. Moreover, surgeons, in general, are often too busy to take the time to treat a complex subject, and render it simple. Last, surgeons are often very egoistic and self-centered: they have a fixed, unshakable belief that what they do and are doing is the best possible solution for their patients. For sure, they are, and can rightfully be, proud of what they do and are willing to write about it, but most often, this does not comply with the fundamentals of scientific writing.

Far for, at that time Editor in Chief of the British Medical Journal and fond of France, liked to compare scientific writing to a gold fish in a fish bowl. The bowl scaffolds and shapes the inner contents. The water contained in the bowl is the style; the fish is the material (data) under scrutiny. The fish has to be alive (credible) and one with a head, eyes, fins and a tail (structured); the water (style) has to be clear (to see the fish). The bowl (also structured) has to be clear, to see the fish through both the glass and water.

Structure-wise, an original article (either non-comparative case reports or case series, or comparative cohort or case-matched series, studies where the comparison is determined by randomization, or structured analyses of such comparative studies (systematic reviews or meta-analyses)) should follow a systematized (“IMRAD”) sequence which usually includes (by convention) an introduction, the presentation of the study material or population, the methods used to study the material or population, and a discussion of how the results compare to what others have said, how credible and robust the authors’ methods are, and what the conclusions are, or should be.

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material and analysis are, how credible and strong the comparators from the outside literature (list of references cited usually added after the core of the article), and conclude where do we go from here (what remains to be done). Tables are often used to arrange and facilitate the description of the material (tables are more “digestible” than sentences) while graphs and figures are most often expended for the results (thus visualized). The core text is headed by a title, recapitulated in a summary (or abstract). The style depends of the type of study: observational (the conditions of the study are not under the control of the researcher) or experimental (here the conditions are), and thus whether the contents are descriptive or analytic, determining whether the language is descriptive or declaratory.3

Medical writing is therefore a skill: the writer has to be able to convey complexity into simple messages, easily understood and absorbed by the reader, discuss the results as compared to the literature, placing the current paper within the global literature. For this, critical appraisal of the literature is fundamental.4

As voiced by Farfor many years ago, we make a plea that teaching seminars on medical writing and clinical methodology, already established in the UK, France and Switzerland, should now be made available in the international field, and particularly, in Spain.

REFERENCES


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