This brief review is intended to be a discussion and reflection on the relevance of subspecialty biomedical journals in the overall academic mission of physicians and biomedical scientists. As members of several journal editorial boards, we provide some reflections on the ever increasing body of medical literature, and the roles of journals as vehicles for the dissemination of new research and knowledge. The opinions expressed herein belong solely to the authors, and do not represent the official views of any of the journal that these authors have been associated with.

Why so many journals?

The proliferation of biomedical journals, particularly over the past 20 years, inevitably leads one to question the need for, or even the relevance of subspecialty journals that focus on a select audience within the biomedical community. What can a focused subspecialty journal contribute to its readers? New journals often arise following the presumed recognition of specific unmet needs by researchers or members of a scientific community.
Editors are always eager to receive submissions that are novel, important, timely, methodologically rigorous in study design, and are well written. Another key determinant that many authors fail to consider prior to submission relates to how relevant the article being submitted is to the journal’s mission and the journal’s intended audience. For example, a very high quality study may be rejected from a high profile journal simply because the article’s content is not felt to be relevant to the primary readers of the journal, even though the quality of the study and the findings may be outstanding. Even when studies demonstrate very strong methodological approaches in study design, rejection may result from failure to demonstrate sufficient novelty, or perceived limited importance of stated findings or conclusions of the study. A critical issue that all authors must consider prior to submission is with the quality of the writing. It is truly surprising to see so many manuscripts submitted with poor writing and grammar. This is very unfortunate, as some of these manuscripts may contain very compelling and high quality findings. It is a real shame to reject a manuscript simply because the overall message is muddled by poor writing. In this case, assistance from a scientific writer should be sought, and may make the difference between acceptance and rejection.

What makes a “good journal”?

This is a complicated, but nonetheless important question. While “good” may mean different things for different individuals or stakeholders, there are a number of highly desirable attributes that a “good journal” should strive to accomplish, namely the establishment of open, transparent and ethical editorial practices, blinded peer review, and wide circulation accessible in searches of trusted databases and use of social medial to disseminate content. A “good” journal should have a reasonable turnaround for review and rejection of manuscripts (ideally within 15–21 days), and subsequent publication of accepted manuscripts. Other highly desirable attributes are the inclusion in prominent journal databases and indexes, and reasonable publication charges.

The open access movement has added new dimensions and arguments regarding the importance of dissemination of journal contents beyond subscribers. From a societal perspective, is an open access journal “better” or more desirable than subscription based journals? This too is a complicated question. While in principle it is highly desirable that any journal content be made available to all readers in an unrestricted manner (open access approach), this approach can also be problematic, especially when substantial publication charges result in a financial incentive that promotes acceptance of articles simply for the sake of generating revenue (predatory publishing). Indeed, the explosion in numbers of open access journals over the past decade has led to many reported instances of questionable and shady behaviors by publishers intent on simply securing author fees.

A discussion about what makes a “good journal” would be remiss if it failed to include consideration of the impact factor. The impact factor is a calculated metric derived by dividing the number of times an article is cited in the prior two years by the number of articles that are published by a given journal.
Looking beyond impact factor: how can editorial boards meet the needs of the audience served by the journal?

The last point mentioned above leads us into a discussion of how journals can strive to add value and quality to their product without solely focusing on the impact factor. This is important for many reasons. As stated, the impact factor has a number of limitations. Importantly, for some subspecialty journals with relatively limited circulation, a high impact factor is essentially impossible to attain, as most papers in such journals are not likely to be cited as frequently due to the relatively limited audience of scientists and researchers in the respective field. Thus it is possible for a truly outstanding paper published in a focused subspecialty journal to be cited substantially less than a paper of inferior quality published in a more widely circulated and less focused journal with higher impact. This highlights the importance of recognizing the impact factor as only one important metric of quality, rather than being the only metric or standard for quality of published material.

How else can editorial boards improve on the quality of a journal, besides trying to boost the impact factor? This is a question worth asking by every editorial board as it addresses the very reason for having the journal in the first place. This question will also have potentially different answers depending on the specific type of journal. The obvious and central mission of every journal is to provide a platform for the dissemination of medical and scientific knowledge. While the journal cannot control the quality and type of content it receives (to a certain extent; for example some journals proactively recruit submissions from high profile authors), it is the responsibility of the editorial board and publishers to ensure timely and expedited review of submitted content, ensure fair and unbiased review, and rapid publication and dissemination of any accepted content. The advent of social media provides new opportunities for journals to advertise content and disseminate information together with medial clips, author interviews and other sources of information that greatly enhance the visibility and ease of use of the journal and its contents.

Journals can also develop creative ways to provide continuing education credit that may be linked with specific journal content, thereby fulfilling some of the continuing education needs of its readers. Journals can also develop specific editorial resources to support manuscripts submitted by physicians in training and young faculty. For example, the journal may provide an enhanced internal editorial review with respect to scientific writing and manuscript structure, specifically aimed at mentoring young physicians in the early stages of their independent careers. Such a service may prove to be highly attractive to young faculty with limited experience in publishing, and would provide an opportunity for editorial boards to provide mentoring for future generations of physicians and scientists.

Current innovative biomedical research is becoming more and more multidisciplinary and multicultural with the investigators of most scientific studies coming from different fields of expertise and backgrounds. Nevertheless, readers of biomedical journals who may have substantial expertise in their specific field of interest can also lack understanding in other disciplines or translational aspects of research. Thus, a strong educational commitment to create bridges among different research disciplines and fields of knowledge should be considered as a metric of quality for a biomedical journal today.

Figuring what the intended audience wants and needs is another key metric of quality for biomedical journals. This requires methods and portals for communication between the editorial board (and publishers) and readers of given journal. Surveys, use of social media sites, and the provision of direct communication links between readers and editorial boards all help in facilitating a two way communication between the “makers” of the journal and the consumers. The advent of social media certainly provides new opportunities to facilitate this interaction.

REFERENCES