CHAPTER 1

Surgical Publishing in the Twenty-First Century

Journals

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“If it has been in print and especially if it has been peer reviewed, it shouldn’t be in print again.”
Donald Kennedy, PhD [1]

Introduction

The death of biomedical journals is perhaps premature. Electronic publication is currently being used increasingly in parallel to the traditional paper format [2]. The importance of the story of Rip Van Winkle was not that he slept for 20 years, but that he slept through a revolution. As surgeons, and particularly as editors, we must not sleep through this revolution and be more than marginally involved with these changes. Editors and journals must become more sensitive of and responsive to this rapidly evolving journalistic culture. In recent years our lexicon has become saturated with concepts such as the Inglefinger rule, the fair use doctrine and safe harbor guidelines. The electronic news media (ENM) have made us more acutely aware of the importance of issues surrounding intellectual property.

Are We at the End of the Paper Literacy Era?

ENM has not as yet become the gold standard of publication. This editor is uncertain as to the extent science citation indices will be impacted by ENM when compared to traditional print publications. However, in the future, electronic publications will exercise a much more influential role. Although ENM is in its embryonic stage, the publication industry is not yet prepared to have it take over the role of traditional journals. Several advantages of electronic surgical publishing are:

- The volume of information (memory) is infinite.
- The transfer of information conserves time.
- The reader may preselect topics of primary interest.
- Ease and diversity of use.

M. Schein et al., Controversies in Surgery © Springer-Verlag Berlin Heidelberg, 2001
Interactivity between the journal and reader will allow rapid comment and response.

The problems that editors and journals increasingly face with the competitive edge of ENM are paper costs, physical space, accessibility and relevance. The advantages of ENM apply to changing concepts of library design in today's market as we give rise to the virtual library. This revolution is consumer driven and stimulated by the advent of inexpensive computers and their capacity to store larger amounts of information.

The Internet and World Wide Web have already expanded our access to and utilization of information including third world countries. House officers, surgeons and patients are aggressively utilizing these technological advancements. It is a frequent occurrence now to have a surgeon, resident, medical student or patient respond, when asked where they obtained their information, to state, "I found it on the Internet." The EM publication process now involves textbooks, papers, magazines, newspapers etc. Ultimately the electronic media will depend upon the acceptance by peers [3].

Many of our colleagues contend that there is too much information to consume already with minimal reading time. The availability of a pre-print before formal publication is a real concern. The New England Journal of Medicine (NEJM) and the British Medical Journal are opposed to electronic pre-prints. Should the public trust only those findings published in peer review journals? This will be no easy task. Pre-publication peer review will become an even greater problem with ENM where readers will review a manuscript before publication. Several institutions have addressed this concern (MIT publication "Fostering Academic Integrity").

Editors and authors will be burdened with concern for misappropriation of intellectual property. Post-publication reviews pose similar problems. Once ideas become public, then theft, scholarship and plagiarism too often follow close behind. Of the many issues confronting ENM, the most difficult will be peer review and intellectual property. The Inglefinger rule, authored by the previous editor of the NEJM, states that the NEJM would not publish a manuscript whose results were made public before appearing in their journal. Editorial concerns about redundant ("salami") publications will multiply with ENM. Communicating ideas electronically to a worldwide audience will make it difficult to establish ownership. The author either establishes a claim that converts his/her work into intellectual property or disposes of that claim through some contractual agreement. The author owns, through copyright, his/her expression of ideas. The mechanism for establishing ownership of a new product, process, or technology is very different: the process of publication supports the claim of priority for anything contained in the work that is patentable [1]. The entry of information into the ENM gains great publication exposure but intellectual property will need a better focus. Issues of intellectual property ownership will continue in the ENM during the twenty-first century [4].

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