The death of biomedical journals

Electronic journals supplement their paper cousins

EDITOR,—Exaggerating rumours of the death of biomedical journals, Ronald E LaPorte and colleagues fail to acknowledge that the publishing of biomedical journals has flourished over recent decades, with more journals in circulation to a greater number of readers than ever.¹ Their logic suggests that we are facing the end of paper literary history, but the development of interfaces between people and technology is rarely so linear and predictable. Indeed, the journals' success is partly driving the evolution of biomedical information systems. Why are vinyl records, which are virtually obsolete, analogous to biomedical journals? Could not electronic biomedical communication networks complement and build on paper journals, much in the way that rentals of videotapes of films not only failed to ruin the film market (as once feared by film studios) but fed consumer appetites for more films?

LaPorte and colleagues undervalue peer review and its quality assurance function in biomedical research and practice. While the high cost of paper journals for developing countries is prohibitive, it is not merely lack of biomedical information but lack of useful high quality information and the ability to differentiate it from dross that is at issue here. In arguing that peer review should be modelled as a democratic electronic network, with the quality of contributions assessed according to popularity, LaPorte and colleagues offer populist appeal to the lowest common denominator: the frequency with which scientific reports are accessed by on line users. Their analogy of selecting a film from surveys of filmgoers suggests a parallel in which the most valued scientific papers will be the biomedical equivalents of *Rambo*—highly popular with the mass appeal of bread and circuses but hardly adding to culture or knowledge. Peer review is a democracy achieved through participation but no consensus. Because the "whole scientific community" whom LaPorte and colleagues propose as peer reviewers is normally distributed, a range of knowledge and skill exists and needs to be maintained systematically.

LaPorte and colleagues ask why research communications have to be permanent and advocate the construction of "ever changing stories" of research, much as we have accepted colourisation

of black and white films. Researchers are likely to react to this as film directors have to colourisation—with abhorrence that the original vision, quality, integrity, and moment of time captured by the film (or research) have been altered grotesquely. Increased ease and diversity of access to information will shape and accelerate profoundly the evolution of biomedical journals and peer review. Rather than render peer review journals moribund, however, informatics can more effectively, efficiently, and equitably diffuse information and improve the quality of biomedicine the world over.

GEORGE A GELLERT
Director of medical programmes,
epidemiology, and public health

Project HOPE,
Millwood, VA 22646,
USA

1 LaPorte RE, Marler E, Akazawa S, Sauer F, Gamboa C, Shenton C, et al. The death of biomedical journals. *BMJ* 1995;310: 1387-90. (27 May.)

Popularity does not equal peer review

EDITOR,—In announcing the death of biomedical journals, Ronald E LaPorte and colleagues extol the potential of the information superhighway for the transmission, compilation, and retrieval of data.¹ The presumption seems to be that expanded access is one of the most ardent desires of readers of biomedical journals. An electronic research communication system in physics, which has grown to 40 000 users in just four years, is given as evidence. Perhaps physicists are different from physicians. I don't know any medical practitioners who want more to read. Most of them say that there is too much to read now and too little time for reading. LaPorte and colleagues point out that the computer can narrow the focus as much as one wishes so that only those reports of "interest" to the user are pulled out. This may be useful to a researcher in a highly specific subject (such as high energy physics theory), but it ignores the purpose of reading a journal to keep abreast of developments more generally.

Moreover, a system such as that proposed, if it is really going to be fast, represents the death knell for the peer review system that has evolved over the past three centuries. LaPorte and colleagues acknowledge this, suggesting that it be replaced by an egalitarian approach in which each user rates the report and the ratings are summed. This is not peer review in the sense of analysis by an expert but simply a popularity contest. LaPorte and colleagues propose that, to assess the "impact" function of peer review, the number of times a report is accessed could be used to indicate its worth. This, however, is just another variation, in which an expert who critically analyses the research would count the same as someone who was simply "surfing the net."

Finally, circumventing the review system would mean that the opportunity to improve a manuscript through peer review would be lost. My belief, based on a decade's experience as editor of a medical journal, is that every paper that gets published is improved by going through the review process. Sometimes the science is made better (when, for example, additional experiments or an improved statistical analysis are required), often its presentation is improved, and always the quality of the writing is enhanced. Perhaps LaPorte and colleagues submitted their paper in precisely the

form in which it appeared in the *BMJ*, but I bet not.

ROY M PITKIN
Professor

Department of Obstetrics and Gynaecology,
University of California,
Los Angeles, CA 90095-1405,
USA

1 LaPorte RE, Marler E, Akazawa S, Sauer F, Gamboa C, Shenton C, et al. The death of biomedical journals. *BMJ* 1995;310: 1387-90. (27 May.)

Permanence of paper puts authors on best behaviour

EDITOR,—I am nervous, elated, and keyed up with all my faculties a-tingle because I am writing a letter to the *BMJ*. Because my thoughts may be set for eternity in print, I am on my best behaviour. I shall check my spelling, my facts, and my references, and I shall agonise over construction. Like herpes, letters to the editor are forever. Once the presses roll, that is it. And that's how I like it. It puts me on my mettle. That's why I shall read this letter at least four times before finally subjecting it to the most rigorous peer review process I know: my wife's beady eye. Yet still I won't dare to send it—I will sleep on it awhile to ponder the central question of composition: is it worth the paper it's written on?

Ronald E LaPorte and colleagues' paper was so important that I took it away from my desk and personal computer and curled up in the sunshine to read it and give it my full attention.¹ I even spotted a few mistakes in it. Would I be doing any of this if I had read it on the Internet? I might have given it an instant response, but would I have come to the penetrating insights that the process of careful composition can create?

Since 1989 I have been writing for the electronic decision support system Mentor, and I need no persuading of the value of this medium, but perhaps my experience can allow me to sound a note of caution. If the research communication I am referring to can be constantly changed and is perpetually provisional, what am I referring to? My readers cannot check my thought processes if they do not know what the reference said at the time I was reading it. If there are no fixed points of reference we cannot communicate.

LaPorte and colleagues state that the paper based biomedical journal will become extinct in a few years. With the above observations in mind, I predict that it won't be extinct very long.

MURRAY LONGMORE
Principal in general practice

Ferring,
West Sussex BN12 5QT

1 LaPorte RE, Marler E, Akazawa S, Sauer F, Gamboa C, Shenton C, et al. The death of biomedical journals. *BMJ* 1995;310: 1387-90. (27 May.)

Journals are not yet obsolete

EDITOR,—Much has been forecast in the past: the creation of cinema will be the death toll for theatres; the invention of television will be the death toll for cinema; the invention of video will be the death toll for cinema; the invention of the word processor will mean the end of the pen. Now it is the 1990s and we have the worldwide web and are told that paper journals will die.¹ But life is not as

Advice to authors

We prefer short letters that relate to a recently published article and we are unlikely to publish letters longer than 400 words and containing over five references. Letters may be shortened. Your letters should be typed with double spacing and include a word count. All authors need to sign the letter and provide one current appointment and address. We encourage you to declare any conflict of interest. Please enclose a stamped addressed envelope if you require an acknowledgment.