Style Matters

The paper chase

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A hundred years ago the *Index Medicus* weighed 2 kg and remained at that size for over 60 years, until it started to bulge with the information explosion, and in the 22 years between 1955 and 1977 it increased by almost eight times to over 30 kg.¹ A few years ago it was calculated that one new article appeared in the medical journals every 26 seconds,² and the rate must be much faster now. It is difficult to keep up, and learning to do so should be an important part of medical education.³ The deluge of data is nowhere more apparent than in general practice, which is the target of information from both hospital specialties and the pharmaceutical industry—the first because we send them patients, and the second because we sell their drugs—at the same time the gatekeepers and retailers of the NHS. But there is now an increasing amount of research from general practice, and this paper looks at what happened to research publications from one academic department of general practice.

Analysis of outcome

In the five years after the establishment of a department of general practice at Glasgow University in 1974 some 50 papers were published in medical journals, for which one of the three full-time members of the department was the first named author. These papers exclude letters to the editor and articles that were commissioned or that appeared in books or non-medical publications. The papers were submitted to 27 different journals, of which nine journals received more than one. The average time taken for acceptance or rejection is indicated in the table, together with the time taken for publication.

On average it took about two months to hear whether a paper had been accepted for publication or not, ranging from just over a week for the *Lancet* to reject a contribution to over five months for the *Health Bulletin*. The average period from acceptance to publication was almost five months, giving a total publication time of about seven months, ranging from two months for the *Lancet* to 18 months for one of the other journals. Twenty of the papers were accepted by the first journal to which they were sent and a further 14 by the second, with a maximum of six submissions for one paper. On the whole, more frequently published journals responded more rapidly, but as each paper was submitted on average to two different journals before acceptance, overall it took about nine months from first submission to eventual publication.

Ten of the journals concerned made no comments whether accepting or rejecting a paper, whereas two others said they would send comments if requested, and a further two indicated that the papers were peripheral to their main interests. Helpful

Papers from a department of general practice published between 1974 and 1979

Journal	No of issues a year	No of papers sent	No (%) of papers accepted	Average time in days (to nearest whole number)			
				Sub- mission to re- jection	Sub- mission to ac- ceptance (A)	Accept- ance to pub- lication (B)	(A) and (B)
<i>British Medical Journal</i>	52	18	2 (11)	27	27	66	93
<i>Health Bulletin</i>	6	8	7 (88)	158	98	78	176
<i>Journal Royal College of General Practitioners</i>	12	18	7 (39)	47	87	139	226
<i>Lancet</i>	52	12	3 (25)	8	23	39	62
<i>Medical Education</i>	6	12	8 (75)	91	114	216	330
<i>Practitioner</i>	12	2	2 (100)		30	230	260
<i>Royal Society of Health Journal</i>	6	2	1 (50)	49	27	119	146
<i>Social Science and Medicine</i>	18	2	2 (100)		80	130	210
<i>Update</i>	36	12	12 (100)		40	209	249
18 Other journals*	—	18	6 (33)	61	29	226	255
		(1 each)					
Overall			50 (48)	63	56	145	201

**British Journal of Medical Education*, *British Journal of Preventive and Social Medicine*, *British Journal of Social Work*, *Community Health*, *Computers and Education*, *Family Planning*, *International Journal of Epidemiology*, *International Journal of Health Services*, *International Planned Parenthood Federation—Medical Bulletin*, *Journal of Biosocial Science*, *Journal of the Royal College of Physicians of London*, *Medical Teacher*, *Population Studies*, *Public Health*, *Scottish Medical Journal*, *Social Work Today*, *Transactions of the Royal Society of Tropical Medicine and Hygiene*, and *Tropical Doctor*.

referees' comments were made available by the *Journal of the Royal College of General Practitioners*, *Medical Education*, *The Practitioner*, and *Social Science and Medicine*. All these comments were anonymous, and the *Scottish Medical Journal* was the only publication to identify its referees. The *Lancet* also provided helpful suggestions when accepting a paper. The most frequent reason given for rejecting a paper was lack of space.

The papers published by one of the members of the department as first named author were reviewed for reprint requests. Over the five-year period 19 such papers appeared in a total of 13 journals. Altogether 102 reprint requests were received, ranging from 26 for one paper to one for another, with an average of five per paper. Most requests came from the United States (46), followed by Britain (23) and Europe (16); these last were from 10 different European countries with the largest number from West Germany. Of the remaining requests, 11 came from Israel, five from Canada, and one from Africa.

Clearly, much time is spent in getting papers published, not only in waiting but also in writing, reviewing, and editing. There are two extreme views on research publications. At one end of the range are those who think that either they or other people should write as much as possible,⁴ and at the other extreme are those who will not put pen to paper unless it is thought to be a major advance. The problem is that we often do not know without hindsight what is important, and research in any topic is

like a froth from which a few bubbles will rise and point the way forward. But without the froth of activity and communication there would be no important advances.

Integrity and responsibility

Research implies integrity both from those who do it and from those who publish it. This is usually taken for granted, but the boundary line between belief and fact is not always clear-cut. This blurring may have major implications in any particular field, ranging from the Piltdown forgery in the prehistory of man,⁵ through the questionable motives of Cyril Burt in psychology,⁶ to pronounced differences in the interpretation of evidence in the current controversy over whooping cough immunisation.⁷⁻⁹ Some North American journals reserve the right to inspect the original data on which research publications are based, which may be a prudent safeguard.

Journals also have responsibilities towards contributors, which the great majority strive to fulfil. But in one instance an internationally known publishing house asked to include a conference paper in one of their new journals, and then two years later decided not to publish the paper which they had prevented from being submitted elsewhere. In another instance an international journal took six months to acknowledge receipt of one article, and despite reminders has still to acknowledge receipt of a second paper after three and a half years.

General practice impinges on many professional interests, and there are sometimes difficulties in publishing in subjects such as social work. One social work journal recently rejected a paper that they acknowledged was succinct, methodology correct, and well written, because the findings might be bad for the image of social work! So much for the evaluation of services. In another more recent case a social work journal published an article from a doctor with the photograph of an under age patient on the frontispiece, which was recognised by those concerned and caused considerable distress. When the author remonstrated with the editor for removing the masking tape from the photograph, the complaint was brushed aside, and they were told not to bother to submit any more papers to that journal.

There is no point in publishing the same research results in different forms in several journals, and the proper use of key words for computer reference systems should make it possible for those interested to find relevant papers. Equally it is pointless doing research if the results are not communicated, but there are pressures to make such communication an end in itself. One of these pressures is the weight which is thought to be given to the number of research publications in addition to accredited training when assessing candidates for jobs, although other considerations may be just as important.¹⁰ Another factor in the growth of research papers for their own sake is the commercial interest in such activities. The number of journals has greatly increased as some publishing companies have realised the potential of a captive market and contributors eager to see their names in print. For general practitioners, in particular, there are an increasing number of publications sponsored by the pharmaceutical industry, some of which are of good quality, but the quantity is surely getting out of hand.

How to help contributors

It may make little difference to those submitting papers whether a journal is commercially sponsored or not. Many of the former will have a professionally respectable editorial board, while the latter depend on circulation and advertising to survive. There are some things perhaps that all these journals could do to help contributors, and at the same time themselves. Why not indicate clearly in each issue the current pressures on space, and the likely consequences of this for the chance of acceptance and the time it will take to publish? If papers are rejected because

they are peripheral to the main interest of the journal, or not up to standard, or not even worth having reviewed, then why not say so clearly rather than making excuses about space or giving no reasons at all? If papers are reviewed, why not send the comments to the authors, and is it really necessary for referees to remain anonymous? If someone is considered competent to give an expert opinion on a paper, then surely they should be prepared to put their names to what they write.

It may be nice to receive free reprints of one's publications, and even more gratifying to be asked for one, but is this really necessary in an age of easily available photocopies? In our experience most of the reprint requests come from North America, where the system of preprinted request cards is well entrenched. How many reprints are actually read, rather than being filed away by a secretary responding to the latest print-out of references? Surely the costs in terms of paper and postage now far outweigh the gain of personal kudos and custom.

Perhaps there would be less enthusiasm for multiple appearances in print if advancement depended as much on service and teaching work as it did on research. These other activities may be more difficult to measure than the number of publications in a curriculum vitae, but sometime we may get round to asking those who are treated and taught. In the future perhaps computers will be able to satisfy our compulsion to communicate. To a certain extent this is already happening, in that some clinical research information is put directly on to computers for immediate access by other workers. Computerised information systems with visual display are already commercially available in the home. It does not take great imagination to see the possibilities of bypassing the world of paper altogether with the marvels of electronics. Just think of the rapid storage and retrieval of research data, and all those trees that would be saved.

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References

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- 5 Millar R. *The Piltdown men—A case of archaeological fraud*. London: Gollanz, 1972.
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- 7 Stevenson J. Vaccination against whooping cough. *Lancet* 1977;ii:357-8.
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It has been traditionally taught that when BCG immunisation has been given into an arm no further immunisations should be given into that region for three to six months. Is this so?

Clearly a patient should not be given further injections either in the vicinity of an inflamed area that has not yet settled down after BCG vaccination or when there is a possibility of adding further insult to any inflamed regional lymph nodes. But if there are no such contraindications further immunising injections may be given. A canonical ban for three to six months is not "traditional" teaching in my experience.

Is it safe to sterilise feeding bottles in microwave ovens?

Probably, but neither I nor a professor of microbiology whom I consulted knew of any research on the matter—and in particular on how long the bottle would need to be kept in the oven.