

It may pay to publish many mediocre articles rather than a few good ones

Too many journals – too little good research

I sent my first manuscript to an international scientific journal in 1998. In those days it was normal for manuscripts to «go wandering». This meant that when a manuscript was rejected by one journal, it was sent on to another, normally less prestigious, journal than the first you had tried your luck with. When the manuscript was rejected by the second journal, it was sent on to a third. In the meantime, you waited. The wait for a response from the editors of journals was well known by researchers. It caused a lot of frustration and wasted time, but what might look like meaningless activity for outsiders was in fact not only that. The manuscript was often evaluated by external peer reviewers, and as a result authors received sound advice on how they could improve it.

In recent years, this practice has changed. Your manuscripts may naturally still be rejected if you send them to the most prestigious journals, but manuscripts do not necessarily go wandering the way they did in the past. One reason for this is the emergence of a large number of new electronic periodicals. BioMed Central, founded in 2000, now offers more than 220 different journals, and is by no means alone (1). If I had done a mediocre study, I would send the manuscript to one of these journals. I haven't been rejected yet. I have the impression that if a manuscript possesses a modicum of quality, it will be accepted for publication. In the beginning, I was delighted not to have to send manuscripts out wandering. It was wonderful to be able to submit a manuscript and assume it would be accepted. I have mentioned this to colleagues in different fields. Many of them have not reflected over it. «Yes, now that you mention it, I've actually never had a manuscript rejected by one of those journals either», tends to be the response. They are not necessarily inferior publications, they have the normal external peer review, they are indexed in the central databases and are freely available on the internet. So is there a problem?

One reason that these journals accept many manuscripts is the manner of publication. The articles are published only on the internet, and as we all know, cyberspace has virtually no space limitations and the costs of publication are close to zero. Neither the number of articles nor the number of pages concerns editors or publishers. There is room for everything. The problem is that the number of good studies and manuscripts has not increased at the same pace. The result is that a lot of research that is neither particularly good nor particularly important is published.

A primary responsibility of the editors of the foremost scientific journals is still to publish the best and most groundbreaking studies. These are few and far between. Editors compete for the really good articles. They contact researchers at professional congresses and scientific meetings and try to get them to send the very best for their own publications. «Editing is all about personal relationships,» a colleague in a major American journal said to me recently. «You have to be both proactive and aggressive to get hold of the really good papers,» he said. The motivation is naturally that if the journal publishes these articles, they will attract more readers, have more citations, a higher impact factor – and earn more money (2). What editor can resist the temptation to be a little less exacting under the circumstances? If the study is big and important, fast track publi-

cation may also be offered. The journal will then guarantee publication within, for example, four weeks of the manuscript being received by the editorial staff (3). There is clearly a risk that the professional quality assurance will then be poorer than it would otherwise have been. It may not have been entirely by chance that the paper that revealed Jon Sudbø's fraud had in fact been fast-tracked (4).

These two phenomena, that it is simpler to publish than it used to be and that quality control is under pressure, create new challenges. It has become easier for those who want to publish, but more difficult for those who are going to use the research. How do we know whether a study is both qualitatively sound and important? PubMed, the most important biomedical database, has indexed over 5 500 periodicals (5) and 21 million articles (6), and a new article is indexed every minute on average (7). The struggle to keep up professionally, whether one is a researcher or a clinician, is generally said to be formidable and insuperable. In my view this is not so. The bulk of what is published can be safely ignored. The researchers ought perhaps to have dropped the project, and rather used the sorely needed funding on studies that are really needed. When I read information summaries or review articles, I am often struck more by the lack of knowledge than the reverse.

In the case of journals that earn their money by demanding payment from authors, as many of the new electronic periodicals do, the more articles they publish, the more they earn. The researchers will earn more in the form of promotions, research funding and impact on the publication indicator, if they publish extensively. Thus it may pay both researchers and editors to publish many mediocre studies rather than a few good ones. This may be advantageous for the economy of the journals and the careers of the researchers, but whether it benefits many others is open to question.

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