A shift in scholarly publishing practices and the growing menace of predatory journals

A certification process by an independent agency would help tackle the threat of predatory journals

The past two decades have seen many changes in scholarly publishing — something that has largely been the result of the advent of the internet and its growing influence on our lives. In an effort to adapt to this new age of technology, many journals have developed online editions and some journals have even switched over entirely to online editions. A step beyond this has been the implementation of open access journal publication, which continues to become more commonplace within current publishing practices.

With open access journals, the entire journal content is free and readily available to all. Authors retain their own copyright, unlike with most conventional print journals, where the copyright is retained by the publisher. The first open access journal arose in the late 1980s, but open access publishing has been a growing trend in scholarly publishing, and many journals throughout faculties of science and biomedicine now offer open access copyright models. In fact, as of December 2017, the Directory of Open Access Journals (DOAJ) listed 10 565 journals in its directory originating from 122 countries. Many open access journals are issued by very reputable publishers, already well known to us through print journals, along with numerous new publishers who now exclusively produce open access journals. While many of these are high calibre, legitimate journals that adhere to the quality and standards that we have come to expect from reputable publishers, this has not always been the case. Open access journals have many potential advantages, as they can offer faster publication timelines compared with conventional print journals, and they are widely accessible to anybody who has access to the internet, thus coming at nearly no cost to the reader. Indeed, one of the predominant driving forces behind the ongoing advent of open access publishing models is that it is felt that scientific research should not be kept behind the walls of paid subscription models, given that this research remains largely a publicly funded entity. For these reasons, many granting agencies have come to insist that, as a condition of grant funding, the results of any research must be published in open access format and be freely available to all, as opposed to being published in journals only available to those with paid subscription access.

Although open access journals are freely available at no cost, there is still considerable expense in producing them. Copy-editing, electronic storage and other publishing expenditures are unavoidable and need to be recovered from some source of revenue. One way of obtaining such funds in an open access model is to charge authors an article processing fee for publication, although this is not the only method currently used by open access journals. This has resulted in a recent shift whereby publishers are repositioning themselves in this market space. The old paradigm saw content being provided as a service to readers who covered publishing costs through their subscription fees, whereas the new paradigm is that publishers are now a service provider to authors;

therefore, fundamentally changing the publisher–author relationship.

This recent shift in academic publishing practices has also created a new phenomenon: the “predatory journal” — a dangerous and corrosive development.1-3 Predatory journals often charge publication fees to authors without meeting expected baseline scholarly standards or providing robust editorial and review services, which act as the cornerstone of legitimate traditional journals. The result has been that low quality research is now being published, threatening the integrity of the body of scientific literature as a whole.1-3 This acts as a disservice to the readers of these journals, and authors also suffer by not receiving the constructive feedback that occurs with a robust peer review system. As many commentators have stated, the advent of predatory journals is an unfortunate and unwelcomed corruption of the legitimate open access publishing business model. To add insult to injury, authors can be charged, in some cases, large sums of money to publish in these poor quality predatory journals. In other documented cases, predatory journals have chosen to charge relatively low publication fees as a way to increase their market share and popularity among authors worldwide.1-3 This issue is further exacerbated because authors often experience considerable professional pressure to publish and predatory journals provide a deceptively easy route to fulfil this goal. Inexperienced or naive authors often become entrapped by these publishers, who typically find their victims through cleverly worded broadcast emails to the scientific community.4,5

This may seem tragic for those ensnared by predatory publishers, but why is it of importance to those of us who do not publish in such journals? Given the potential for very poor quality research articles being published by predatory journals, there is a threat for our academic body of literature to become diluted and unreliable over time. Incorrect and potentially false data can be given the veneer of legitimacy, become propagated and can even be inadvertently cited by investigators who publish in high quality legitimate periodicals. At this time, the exact proportion of published research that is put out by predatory journals is unclear and,
although still a minority, this sector has shown steady growth since its inception — much like an intellectual cancer. Even more distressing is the fact that some of these journals have been indexed in PubMed.6-8

Experienced authors can often recognise solicitation from these predatory journals, but they remain a tempting trap for inexperienced authors and it is clear that this will become an even larger problem in the years to come, as these journals become increasingly sophisticated. For a time, Jeffrey Beall of the University of Colorado, through his website Scholarly Open Access, provided an extensive list of what he felt to be predatory publishers.9,10 For a variety of reasons, this website is no longer available — a very useful resource that has not been replaced with a readily accessible free online resource. The DOAJ provides a list of journals that fulfil the criteria promoted by this organisation, but it does not list journals that are rejected for poor practices. While the DOAJ has processes for excluding predatory journals in its directory, this process remains imperfect, and there have been instances when journals that have proven to be predatory are listed in the DOAJ.11 Although some for-profit organisations that vet open access journal quality exist, the data that they have assembled are not free and would unlikely be of assistance to the most susceptible victims of predatory publishers, who are often in low income countries and cannot afford the extravagant subscription costs associated with this type of service.10

If we do not have readily available and free-of-charge lists of good and bad journals, what can we do to impede the spread of predatory publishing? Part of the answer is the need to improve awareness of the existence of this phenomenon and ensure that we educate one another, and even more importantly, our trainees.3,5,10 While education is paramount, the implementation of a certification process by a not-for-profit agency would be the ideal scenario. How such an agency should be constituted, however, is a matter of considerable debate. Ideally, “at arm’s length” institutions such as the National Library of Medicine, the Committee on Publication Ethics and similar organisations would be involved. Another unclear issue at this time would be how the costs of implementing a certification agency such as this would be covered. In order to maintain objectivity and prevent conflict of interest, it would be impossible to accept funding from publishers, legitimate or otherwise.

Despite this uncertainty, what does remain clear is that predatory journals are a growing problem that has the potential to pose a major threat to the intellectual community, and continuing to ignore this issue would certainly be at our own risk. Scholarly publishing is undergoing many sweeping changes lately and our intellectual successors will be operating in a very different world. We owe it to them to find a way in which unscrupulous and predatory publishers will not be able to function in the rapacious fashion that we see today — and which looks to continue into the foreseeable future.

Competing interests: No relevant disclosures.

Provenance: Commissioned; externally peer reviewed.

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References are available online at www.mja.com.au.