

# Turning predator into prey – the problem of predatory journals

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## Introduction

The advent of digital publishing and open access publishing models has led to an explosion in the number of scientific journals providing an outlet for clinical researchers to publish their work. While this publishing revolution has brought benefits in terms of easier access and visibility, it has been accompanied by a darker side – predatory publishing.

Recently, one of us (HR) submitted a paper for consideration to this journal. As per the normal editorial process of the *JRCPE*, the submission was run through iThenticate, the plagiarism detection software. This revealed no cause for concern. After peer review, the paper was accepted for publication, but during the copyediting and reference checking stage, a paper with the same title and author was discovered online and the majority of the text was identical to the submission to the *JRCPE* – a clear case of duplicate publication.

After discussion, it was revealed that the paper had been submitted to the other journal sometime earlier. After receiving a series of very strange comments from the reviewers at this online journal, the author (HR) investigated further. This revealed concerns from other authors regarding the reputation of the journal, concern that suitable peer review was not performed, and concerns around the quality of some of the published work in the journal. HR immediately withdrew the paper and made it clear that she wished to proceed no further with the submission process. No further communication was received from the online journal, and HR did not hand over copyright or give permission for publication of a final, peer reviewed version of her paper. The version of the paper that appeared on the website of the online journal was a draft version identical to the initially submitted manuscript, and did not take into account any reviewer comments. Interestingly, in this case, the online journal did not seek payment for publication of the paper.

## What is a predatory journal?

Journals like the one described above can be considered to be predatory; they aim to take advantage of authors for reputational or financial gain, usually bypassing conventions of scientific publication designed to ensure quality and transparency. Predatory journals are open access: the author pays for publication and their papers are then freely available to the public. When open access first started the

aim was to transfer the costs away from the reader, to open up research, allowing more people to access the information and keep up to date. This publishing model is excellent for the dissemination of information, but the system is open to abuse.

Although there are exemplary open access journals available, the less scrupulous ones will seemingly publish anything to obtain the fee. This was demonstrated by John Bohannon who wrote a fake paper containing obvious flaws in the methodology and conclusions and submitted it to 304 journals. More than half accepted the paper.<sup>1</sup> Predatory journals have been found to be dishonest. They have fake archive collections and fake addresses and headquarters. They often pretend to be based in the USA, when actually many are based in India and, increasingly, Africa. Some have been found to use well-known names as members of their editorial board without their permission. The scientific community cannot reliably accept that anything they publish has been performed to suitable experimental and publishing standards as peer review is often either absent or not performed by reviewers with adequate knowledge. Unfortunately, this poor quality control risks distorting the scientific record – a problem for the research community, but also for healthcare professionals and for the wider public, who often lack the training in critical appraisal required to make a balanced evaluation of such material.

## Why are numbers on the rise?

Regrettably the number of predatory journals is increasing. Until recently, Jeffrey Beall (a prominent campaigner against predatory journals) kept a list of journals and publishers he felt were predatory according to certain criteria. In March 2012 there were 59 on his list; prior to his website being taken offline in January 2017 there were 1,140. Many journal companies have discovered that authors are willing to pay considerable fees to get their work published. Setting up such journals provides an easy way to make money, which has driven an increase in numbers of predatory journals. Recent research within the field of emergency medicine publishing suggests that one sixth of all journals (and nearly half of open access journals) in this field were probable predatory journals.<sup>2</sup>

Unfortunately, there are authors who are willing to ignore the unethical practice of the journals just so they can get

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published. There are several potential drivers here; career progression or securing training posts may depend on achieving publication; ongoing financial support may depend on publication; and the increasingly competitive publication environment has made it more difficult for papers to be accepted by leading medical journals. Richard Van Noorden has looked at the cost of open access publishing, which varies considerably, and noted that *PLoS ONE* publishes 70% of submitted articles, compared with *Nature* which publishes just 8%.<sup>3</sup>

There is also a lack of awareness of the problem. Many practitioners, especially at the start of their research or professional careers, are unaware of the existence of predatory journals. Christopher and Young surveyed a group of veterinary and medical students attending a writing course and only 23% of the 145 participants had heard the term 'predatory journal'.<sup>4</sup> Predatory journals themselves prey on those new to research, sending out many spam emails, with a variety of techniques from flattery to special offers and discounts, and they often have misleading or hidden publishing fees, enticing authors to publish in their journals.

### What can the scientific community do?

It is important we all learn to critically appraise papers. These skills should be taught at medical school and reinforced as part of postgraduate clinical training. Exposure to journal clubs during training is patchy, and may focus more on the content and conclusions of a paper than an assessment of quality. It is important to be able to make a judgment of quality to determine whether the paper should influence practice. A number of books and online courses are available that teach how to critically appraise to identify the key points, to assess the quality of the work, the methodology, statistics and whether appropriate conclusions have been reached.

We need to increase awareness of predatory journals. Editorials such as this one play a part in publicising the issue; it is noteworthy that a number of other journals and professional societies have recently engaged with the problem.<sup>2-7</sup> Another important line of defence related to awareness is for inexperienced authors to link up with experienced research and publishing teams. Although this is not foolproof (even the most experienced are occasionally caught out), working with authors with an extensive publishing track record gives new authors access to knowledge of the publishing landscape within a particular field of research – including where the pitfalls are. There are other benefits – internal peer review and feedback, training in how to write and edit, and the knowledge needed to find the right journal as a home for any particular piece of work, thus accelerating the publication process.

Finally, we need tools to help authors identify and avoid predatory journals. A recent initiative which has the potential to help greatly is the Think.Check.Submit initiative (<http://thinkchecksubmit.org>; Twitter @thinkchecksub). This website provides a valuable checklist (reproduced here with

permission) for authors to consider when selecting a journal:

- Do you or your colleagues know the journal?
- Can you easily identify and contact the publisher?
- Is the journal clear about the type of peer review it uses?
- Are papers indexed in services that you use?
- Is it clear what fees will be charged?
- Do you recognise the editorial board? Do members of the editorial board mention the journal on their own websites?
- Is the publisher a member of a recognised industry initiative? (e.g. the Committee on Publication Ethics (COPE), Directory of Open Access Journals (DOAJ), Open Access Scholarly Publishers' Association (OASPA))

Predatory publishing is an unfortunate side effect of the open access revolution. Its existence in no way invalidates the open access publishing model, but authors need the right support, training and tools to be aware of predation, and expose journals with dubious or outright fraudulent business models, and hence starve such journals of the supply of submissions that they need for their continued existence.

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