The Rise of Predatory Journals: What Difference Does It Make?

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The Internet has changed our world for the better in countless ways, such as providing us with the ability to rapidly share vital scientific information on a global basis. Yet, Internet technology has also spawned a very potent threat to the assumed credibility of published scientific research. This threat is the rise of so-called “predatory” open access (OA) journals. If you’re like most plastic surgeons, you’ve received multiple emails inviting you to submit an article or serve on an editorial board of some heretofore-unknown OA journal, and you’ve considered it nothing more than a nuisance—more junk mail cluttering your inbox. But there are plenty of reasons you should be concerned about the rise of these annoying entities that threaten to negatively impact the integrity of information disseminated to the global scientific community and the public at large.

When discussing this rather complicated subject, the first distinction that needs to be made is between predatory journals and legitimate OA journals. As discussed in a previous Aesthetic Surgery Journal editorial, open-access publishing was born in the early 1990s but did not gain substantial steam as a working business model until the period from 2000 to 2004. Since then, while the percentage growth of OA journals has declined, an infrastructure to confer legitimacy on OA journals that meet established standards has emerged, including the widely recognized indexing service, the Directory of Open Access Journals (DOAJ, www.doaj.org). Checking to see if an OA journal is indexed by DOAJ is one helpful way to determine whether it meets peer-reviewed journal standards. Another is to find out if the journal’s publisher has membership in a professional organization such as the Open Access Scholarly Publishers Association (www.oaspa.org), Committee on Publication Ethics (www.publicationethics.org), or International Association of Scientific, Technical, & Medical Publishers (www.stm-assoc.org).

Jeffrey Beall, a research librarian at the University of Colorado in Denver, has become one of the foremost authorities on what he terms “predatory open access journals.” He has published his own list of journals that he says are likely to fall within this subcategory (though others have disputed his judgments, and he has, on occasion, removed titles from the list upon further scrutiny). By April 2013, there were more than 300 such journals on Beall’s “black list,” and he estimated the actual number of predatory journals to be closer to 4000—at least 25% of all OA journals. Beall’s critics say, however, that it is not always easy to identify a true predatory journal versus an OA journal that may be merely young and unsophisticated in terms of its Web presence, marketing, and even its internal protocols for peer-review and editorial board recruitment. At least one critic of Beall’s methodology points out that the term predatory should be reserved for entities that are not merely amateurish but that intentionally aim to deceive.

And there are plenty of those. As reported in Nature, two reputable and well-established European science journals discovered that authors had been paying fees to publish papers through counterfeit journal Web sites that had been created to appear like the legitimate journal sites. Similarly, there have been instances of scientists accepting invitations to speak at conferences with names virtually identical, except perhaps with a hyphen added, to actual events sponsored by legitimate publications. Adding insult to injury, these scientists not only had to pay for their time on the podium but they were sharing the stage with individuals with little or no scientific credibility. Still other reputable individuals have found their names listed on journal Web sites, without their permission or knowledge, as members of bogus editorial boards.

But beyond these unfortunate situations, many of which have no quick or effective remedy, there is an even more serious consequence to the proliferation of predatory journals. Publication of research without the conscientious implementation of peer-review and other scholarly editorial practices can easily result in dissemination of substandard or even patently false data. The harm to the entire scientific community and the public at large is incalculable.

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community is obvious, but it can be particularly detrimental to young doctors and scientists in developing countries who may rely more heavily on OA material than articles from peer-reviewed subscription journals. When, for a fee, individuals can publish their research in a journal that purports to be scientific without their work being subject to editorial safeguards designed to help ensure unbiased and valid reporting, it poses a dangerous threat to scientific integrity.

The attraction of fee-based publishing in a predatory OA journal is multi-faceted. There is the potential to move from raw manuscript to publication rather quickly, as well as to avoid the inconvenience (or impossibility) of correcting mistakes in response to peer-review criticism. The final product is often perceived by media to be as legitimate and quotable as any other published scientific article. A report appearing in one of these online predatory journals has the potential to rapidly spread around the globe, being picked up by numerous outlets and, depending on the topic, even by social media.

There are those who defend such journals by saying that, without them, there are too few opportunities for young physicians and researchers, particularly those in developing countries or with poor command of English, to publish their work. Further, some claim, if a researcher proposes something new and bold, those in the field with an interest in protecting their own pet theories and practices will make sure such contrary findings never see the light of day. Legions of young professionals must publish papers in order to meet the requirements of their training programs. OA journals, even those with lax or nonexistent editorial standards, offer them that opportunity.3

I understand the pressure that many researchers feel, regardless of their age or academic standing, to publish articles. Nevertheless, predatory journals are not the answer! As academic and scientific institutions become more educated concerning the epidemic of predatory journals and better able to discern which journals actually fall within that category, those who have relied on such vehicles for their publication credits will find themselves in dire straits. It seems far better to focus attention on procuring grants or winning institutional support for research projects that ultimately can bear the scrutiny of the peer-review process. Considering the emergence of online journals, some of them legitimate and open-access, there are many more opportunities today for publication. There is no need to knowingly scrape the bottom of the barrel or, through failure to properly investigate a journal, to unknowingly fall victim to a scam.

There are many of us, fortunately, who would never consider publication of our work in anything but a well-established, reputable journal, preferably one with ties to our specialty societies. All researchers, whether in plastic surgery or other fields, must resist solicitations that promise quick publication and wide dissemination of their research without providing proof of legitimacy and adherence to the principles of transparency outlined by the World Association of Medical Editors (Supplemental Table 1) and others.7 As scientists and medical professionals, we must use appropriate social networks and other means to share with each other untoward experiences with publishers who fail to meet their obligations for transparency. Additionally, we must urge our institutional librarians to weed out predatory publishers from their online catalogs.8

In the increasingly dangerous world of online publishing, we should remain aware that not everyone plays by the rules. Predatory journals exert a harmful influence on the scientific community as a whole. Their proliferation undermines the basic principles upon which the merits of scientific research are established. In this bold new communications environment, where some would have us believe that “anything goes,” we will do well to remember that scientific integrity does matter and principles of transparency in journal publication do make a difference.

**Supplementary Material**

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**REFERENCES**