

The wonderful aspects of Open Access publishing - and the unfortunate dark side

Asbjorn Jokstad, Editor-in-Chief

Correspondence

Institute of Clinical Dentistry,
Faculty of Health of Health
Sciences UiT The Arctic University
of Norway Tromsø, Norway
E-mail: asbjorn.jokstad@uit.no

Innovative biomedical research must be ethical, methodologically sound, understandable, and easily accessible. The responsibility for assuring the fulfilment of these fundamentals must be anchored amongst the publisher, the editors and referees, and the authors and investigators. The ambition of *Clinical and Experimental Dental Research* is to provide publication that meets these fundamentals. The premises should be the best from the perspective of the reputation of the publisher, the exceptional quality of the associate editors, and the implementation of the open access (OA) concept.

Wiley is an academic publisher with greater than 200 years of experience. Their scientific, technical, medical, and scholarly divisions publish more than 1,500 peer-reviewed print or online journals. Amongst these are many of the most prestigious scientific journals in dentistry and orofacial medicine. We expect to count *Clinical and Experimental Dental Research* as one of them within the next five years.

The charge of *Clinical and Experimental Dental Research* is to publish clinical, diagnostic, and experimental work of high scientific quality and originality within all disciplines and fields of dentistry and orofacial medicine. The ambition can only be possible with the assembly of competent editors that assure excellence of the peer-review process. It is with pride we can boast a consortium of twenty-five associate editors garnering exceptional qualities from the perspective of scientific merit and scholarly recognition. These esteemed colleagues represent different countries, continents and a broad expertise. It may be noted that the editors of *Clinical and Experimental Dental Research* combined have published more than 2000 scientific reports listed on Pubmed.

The core concept of OA is that the authors pay a publication charge for the publication of their article so the readers can have unrestricted online access to their peer-reviewed research report instead of having to subscribe to the journal. Even though the notion of OA has existed for decades, the continuous advances in information technology creates constantly new opportunities to disseminate research findings. An illustrative example is the world's largest database of health literature managed by the United States National Library of Medicine, MEDLINE. The database was originally only accessible for a fee using the MEDLARS software run on a mainframe computer through a university library terminal. In 1997, access to the full database suddenly became free through the Pubmed portal on internet, about the same time as a new generation of internet browsers emerged. Further developments in information technology prompted academicians and scholars to get together about a decade ago to establish the Budapest OA initiative (Budapest, 2012).

The advances in computing prompted also the World Health Organization in partnership with six major publishers to launch a marvelous initiative named the HINARI Access to Research in Health Program (Hinari, 2012). The ambition was to facilitate or enable developing countries to access collections of biomedical and health literature. The statement of intent reflects the aim: "Recognizing that biomedical research is essential to improving the health of the developing world, and that access to primary biomedical information is essential to research, a new effort is being undertaken to open access to the primary biomedical literature for developing country researchers and academia". The continuous advances in information technology allowed major publishers to create digital versions of printed journals, and they supplied codes for online access to the institutions in the countries that qualified for HINARI. At that time, I

worked as the scientific affairs manager for the Federation Dentaire Internationale (FDI), which included assisting the delegates and speakers from the 150 plus member associations during the annual congresses. It was often a challenge to solve their acute problems when they suddenly could no longer access papers on their laptops that they had brought along abroad. The prospect of being able to solve their acute problem depended on whether their laptop, with a recognizable IP number, had been purchased in a HINARI or non-HINARI country or if there was access to some form of VPN. Even today, such difficulties arise unless one remain working on a hard-wired desktop computer in an institution within a HINARI country. Moreover, the HINARI did not signify that the access to the literature necessarily was free, but that it was accessible at *prices that reflected the state of national economies in the developing world*. Finally, even if one could access the primary literature, the copyright and licensing restrictions remained. It is striking that there are hardly any scientific analyses of the net benefits of this important WHO-initiative. The few that have been published range from being critical, based on the situation a decade ago (Villafuerte-Gálvez, 2007) to highly optimistic, based on the current situation (Van Essen, 2014).

The proponents of the OA initiative believe, on the other hand, that a better way to disseminate peer-reviewed scientific and scholarly literature is by making everything freely available on the internet and without rigorous copyright and licensing restrictions. The first generation of journals committed to open access were the Public Library of Science (PLOS) and BioMed Central journals, in addition to several well-run OA publishers established in South-America and Asia. The growth curve of OA journals has since exploded, and the online Directory of Open Access Journals (DOAJ, 2015) that indexes and provides access to quality open access, peer-reviewed journals lists today more than ten thousand journals. Many serious OA publishers, which include Wiley, endorse the principle of the HINARI initiative, by offering an extensive publication-charge waiver program for OA authors from a specified list of countries (Wiley Open Access).

The overwhelming majority of open access journals today are well-managed, present methodologically solid research and supported by dedicated peer-reviewers. However, *predatory (OA) publishing* has unfortunately also proliferated. The phenomenon is a simple business model where the publisher charge the author for a publication fee, but with minimal or no editorial scrutiny and peer reviewing of the draft manuscript, and without the publishing services that the professional publishers usually provide. We cannot avoid the many shrewd opportunists in the world that are prepared to capitalize on such emerging business models. However, a critical question is why do these predatory journals seem to proliferate according to the “Beall’s list” (Beall, 2015) rather than just die out? It is a bit of a mystery who the “customers” are that trigger the escalation of these predatory OA journals.

As scientists, we struggle in search of a better world, even though most of us are not in the same league as Karl Popper (Popper K, 1994). It is a great responsibility to undertake the role of identifying and selecting valuable good science for publication, to avoid publishing misleading research, and to conscientiously guide in a constructive manner a colleague who submit less methodologically sound research. I hope that the editorial team and I down the road can say that we contributed also to a better world by publishing ethical, methodologically sound, understandable and easily accessible research in *Clinical and Experimental Dental Research*.

References

- Budapest. 2012. <http://www.budapestopenaccessinitiative.org>
- HINARI. 2012. <http://www.who.int/hinari/statementofintent/en/>
- Villafuerte-Gálvez J, Curioso WH, Gayoso O. Biomedical journals and global poverty: is HINARI a step backwards? *PLoS Med* 2007;4:e220. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1896213/pdf/pmed.0040220.pdf>
- Van Essen C, Mizero P, Kyamanywa P, Cartledge P. HINARI grows: one step closer to health information for all. *Trop Med Int Health* 2014;19:825–7. <http://onlinelibrary.wiley.com/doi/10.1111/tmi.12310/pdf>
- DOAJ. 2015. Directory of Open Access Journals. <http://doaj.org/>
- Beall. 2015. Beall’s List: Potential, possible, or probable predatory scholarly open-access publishers. <http://scholarlyoa.com/publishers/>
- Popper K. *In Search of a Better World: Lectures and Essays from Thirty Years*. Routledge: London, 1994. ISBN:0-415-13548-6.