

Editorial

Open Access Publishing: A Public Funding Model

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Richard Horton, the editor of Lancet states that the open access movement is about a historic realignment of power in scientific and medical publishing.¹ Open access literature is digital, online, free of charge and free of copyright and licensing restrictions. Such literature is available for free on the public internet, permitting users to read, download, copy, distribute, print, search or link to full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose without financial, legal or technical barriers other than those inseparable from gaining access to the internet. The only role for copyright in this domain, is to give authors control over the integrity of their work and the right to be properly acknowledged and cited.²

The debate

At the heart of the debate on open access to scientific literature is the premise that scientific and technical information is an archetypal global public good which should be freely available for the benefit of all.³ With traditional printed publication, the wide dissemination of information through academic journals was an expensive undertaking, but now the internet and associated technologies have presented opportunities that have led to calls for greater access to scientific literature. Even though electronic publishing has reduced or eliminated costs associated with the printing, handling, and postage of scholarly journals, other significant costs remain. These include quality control (peer review and editing), production and dissemination (making the edited information available on the internet), and long term preservation.³ The movement called open access maintains that these residual costs of publishing scientific information should be borne by the provider (of research), and that access to the information should not be limited by the user's ability to pay.³

In the traditional model of publishing called the "subscriber pays" model, the author attracted research grants and conducted research but he/she yielded the copyright control to the publisher of a journal in return of the visibility (which helps in career advancement) provided by publishing in the journal. The publisher then sold the research output to the individual or institutional (e.g. libraries) subscribers often at a substantial profit. The profit motive led to copyright restrictions on the distribution of material to users other than the subscriber even if it could be done at little or no additional cost (e.g. if the journal is online) and to the use of the material except as indirect quotations (e.g.

tables cannot be copied for other publications) even by subscribers without the expressed consent of publishers. The profit motive also drives the price of journals as high quality scientific and technical journals often enjoy monopoly positions. Restriction placed on access due to high prices of journals is particularly salient to developing countries but it is important even in developed countries.

Proponents of open access to literature believe that it will enable us to better organize valuable archival information and to orchestrate its communication by scholars of today and tomorrow, so as to improve science. They assert that in biomedicine in particular, open access will provide accurate evidence based information needed at the point of patients care to make health care delivery more reliable. And, that open access publishing by reducing the cost of publication, will generate funds for additional research.⁴

Opponents of open access state that the business model supporting open access termed “author pays” model, where the producer of research (researcher, institution or funding agency) pays for publication of articles is inherently flawed because it discriminates against less resourceful authors (e.g. those who do non-funded research or authors from developing countries) and it can lead to decrement in quality of research publications because such journals would profit by publishing more articles.⁵

Impact of the open access movement

It is indubitable that open access models of publishing provide a new option and that the debate on open access and the presence of open access journals is beginning to have a positive impact. Many traditional journals now offer their archives online free of charge, while retaining subscription only access to newer material. Many publishers have also joined the WHO’s Health InterNetwork Access to Research Initiative (HINARI) that provides free or nearly free access to the content of their journals for people in the developing world. BMJ and Nature have started allowing authors to retain copyright (though they still insist on an exclusive license, the terms of which means that the authors are not free to distribute their articles or allow open access to them).⁴ Even more importantly, Pubmed Central set up by the US National Institute of Health (NIH), aims to become a centralized digital library that provides free access to the full text of peer-reviewed life science research. Similarly, the open archives initiative aims to create a global online archive of published research. If publishers do not allow authors to post their articles on personal or institutional websites, the initiative suggests that they should post the submitted draft together with a corrigendum file highlighting the differences between it and the published version.⁴ The NIH now puts a condition that all publication supported by NIH grants would be deposited in Pubmed Central and be open access.²

The way forward

A public which pays for most medical research through taxes and other public funds is becoming increasingly puzzled by the barriers that deny access to the results of that research. The cost of journals production and dissemination can, and should be covered in ways that do not limit access to information and so do not hinder scientific communication. Issues related to journal quality can be disconnected from the profit motive that can affect both the “subscriber pays” and “authors pays” model by ensuring editorial freedom.

However, the challenge of the profit motive itself remains. Applying the Keynesian logic that suggests that roads and major means of communication can be publicly funded because they serve public good, to scientific publication, one can suggest that there is merit in public funding of at least some scientific journals. Perhaps we can call such a model, the 'public pays' model. Public and not for profit organizations (e.g. scholarly societies) should seriously consider setting aside monies to fund good quality journals that provide open access to their contents without taxing the producers of research. Journals published by WHO (e.g. WHO Bulletin), research councils (e.g. Indian Journal of Medical Research of the Indian Council of Medical Research), and scholarly societies (e.g. Journal of Indian Association of Child and Adolescent Mental Health [JIACAM]) provide successful examples of such efforts. The Scientific Electronic Library Online (SciELO), an initiative of many Latin America governments and public institutions is attempting to do so on a very large scale.³ This comes conceptually closer to the idea of scientific information as a global public good.

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