

Closing *Open Medicine*

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Despite our passion for spreading high-quality information freely and widely, we always knew it would come down to sustainability. Today, as we honour Open Access (OA) week, we are publishing our final editorial in *Open Medicine*. It has been an inspiring journey for all who have been involved in its inception, launch, and day-to-day operations. Around the idea that there is a need for unbiased, publicly shared information, a lively community gathered. There were great debates, wonderful authors and articles, excitement and enthusiasm for what was possible, freed from the confines of paper and for-profit ownership. We are closing Open Medicine knowing we have made a meaningful contribution to something bigger than ourselves, and through our activity, have changed the landscape of medical publishing.

Open Medicine was born from our refusal to stand behind blatant editorial interference in biomedical publishing (1, 2). Editorial interference was (and is) a recurring theme in publishing, a fact hinging entirely on vested interests of publishers with either advertisers, such as for pharmaceutical and medical device companies, or the medical associations who employ them. However, our desire to free ourselves from this model launched us quickly and passionately into the emerging and evolving world of open access (1). Our presence caused other journals to change, to become more open, to evolve with the times. Though there is a debate about whether these efforts are open enough (Open Medicine was both open access and open source, for instance), it is a move that makes information access more equitable.

While inspiring, the process was also greatly frustrating. After initial enthusiasm, interest in the general academic community, both from authors as well as our editorial board and board of directors, dropped off greatly over the year. Academic medicine is slower to recognize the importance of changing old habits, and the lure of disseminating information freely still stands behind doing it in a prestigious forum, however difficult to access. By the end, despite continued efforts to engage the, there were few stalwart supporters. Perhaps our mistake was engaging those established in their careers rather than those with new ones, authors and editors more likely to embrace new possibilities.

The work was also exacting. For those of you considering it, launching and running a medical journal is more work than it seems (3). Based on our previous experiences, our first request for operational funding was for about \$3 million dollars per year. Ultimately, we were able to run the journal and publish articles for a fraction of that. We built upon the Public Knowledge Project's Open Journal System, the open source platform developed by our friend and publisher John Willinsky, which now hosts over 7000 open access journals in 105 countries (4). We also achieved an indexed status in Pubmed after 3 short years (5). We had immense support from the Canadian research libraries, thanks to their own commitment to making knowledge freely available and their frustration with ever-escalating fees for bundled journal subscriptions. We also had contributions from our individual colleagues and institutions to build on in our early years. Finally, we were the recipients of thousands of volunteer hours with journal logistics, technical support, web design, not to mention what accrued from editorial and media members, and our valued bank of peer reviewers. .

The publishing landscape we are leaving is very different from the one we entered 7 years ago. The *Canadian Institutes for Health Research*

has adopted, and then strengthened, an open access policy for their publicly funded research. They are in collaboration with the *Social Sciences and Humanities Research Council* and the *Natural Sciences and Engineering Research Council* of Canada to develop a tri-council policy that will broaden and further reinforce these requirements. Many Canadian universities now have institutional repositories to help their faculty meet these OA requirements, as well as author funds to help authors pay publishing charges that allow their work to be freely (if not openly) available. Most researchers now recognize that high quality OA publications require the same level of peer review and editorial input as traditional journals.

Despite these achievements by Open Medicine and the advancements in the publication landscape, more work is needed. First, while there has been a substantial shift towards making articles freely available, either within scientific journals or institutional repositories, many of our colleagues still do not understand that free to read doesn't necessarily mean free to distribute or create derivative works due to the restrictions imposed by traditional copyright licenses. Second, budget lines for open access fees in grant funding are rarely adequate, are often incorporated with skepticism, and generally used with reluctance. Third, many traditional toll-access publishers have capitalized on OA policies by adopting the appearance, but not the spirit, charging hefty subscription fees to individuals and libraries while offering free access after charging a substantial fee to their authors. This double dipping leaves little incentive to adopt new models and further entrenches ' unfavorable view of OA. Finally, the onslaught of predatory journals has added confusion to the mix, as authors align publication charges with this predatory behavior (6).

Policies adopted to ensure access to those unable to pay have largely failed because of a lack of enthusiasm in the high-income world. The WHO-administered Health Inter-Network Access to Research Initiative (HINARI), is a collaboration between commercial publishers and the WHO that provides researchers at institutions in low-income countries in poor countries free access to medical literature published by their journals. Unfortunately, in 2011 Elsevier withdrew their journals with little warning in Bangladesh, Kenya, Nigeria and Tanzania as opportunities for commercial licensing developed in urban areas, though there are many places in these countries where the costs are prohibitive.. After a substantial outcry, the access via HINARI was reinstated and confirmed, but only until 2015. Donor solutions lack sustainability and are governed by market forces that restrict information (7). If more journals were open access, there would be no need for HINARI.

Had we a crystal ball in 2006, what would we have done differently? There is no question that financial sustainability has been in the forefront of our minds. While we have attempted to pay modest stipends for journal operations, not any of our scientific editors, nor our editor-in chiefs, have been compensated, and most of our administrative staff have volunteered much of their time. For fear of turning away authors, we delayed instituting publication charges until quite late in the game. As researchers, we struggled to be good fundraisers, communication specialists, information technology and web developers, and public relations experts. As busy doctors, we struggled to create space in our lives to match our enthusiasm for what was possible.

As scientists ourselves, we would have liked to experiment more. We published the first wiki-based systematic review (8), had student peer

review groups (9), and this month published the first Wikipedia based clinical article in a peer-reviewed format (10). We would have loved to experiment with novel forms of peer review, making them open for instance, or recording our editorial discussions, but getting and writing quality peer reviews is hard work. We would have liked to explore more options for non-conflict ridden advertising. We would have especially liked to develop strategies for reader engagement – improved rating, commenting, and opportunity for post-publication dialogue. We were brave, but perhaps we could have been bolder.

We are grateful to our Board of Directors and Editorial Board who provided support to us over these years. We are especially thankful to the many authors who entrusted their work to us and we are proud to see their articles archived in PubMed Central and on Medline. You are the reason we embarked on this journey and we will continue to advocate for accessibility, transparency, and accountability in health care publishing in Canada and we hope you will as well.

It is with sadness that we write these last sentences. We survey the landscape of publishing in general, and see that there are struggles everywhere. If articles are made freely available, how does one assign them value? How can one capture the dozens of hours that went into reviewing, editing, and publishing an important article? Are there better ways to both do science, and report it, to improve its ability to transform our most difficult problems? We know there is. Though we are not accepting submissions for the foreseeable future, our enthusiasm for what gathered us around Open Medicine remains, and there are a few of us exploring possibilities about how we might continue, revisioned. In that spirit, we will keep our eyes with theirs, tightly focused on the horizon for whatever opportunities there are to make medicine as open as possible, such that no one is excluded.

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