

# Open access and the Science of Perpetual Change: Developing an Integrative Perspective of Health Services Research

Dr. Jarold L Cosby

Assistant Professor, Applied Health Science, Brock University, Ontario, Canada.

## Introduction

The purpose of this inaugural article is to show that open access journals provide a unique dissemination strategy that effectively meets the demands of health services research and applied decision-making. I will begin with a general discussion of the merits and limitations of open access journals, providing an overview of how and why health services research can benefit from this publication method. I will then conclude with a brief description of a new open access health services research journal.

## Open Access in a Supply and Demand World

What does the scientific world have to say about open access (OA) journals? Arguments tend to be based on three fronts: cost, impact factor, and academic promotion. In his analysis of open-access journals, Harnard et al. (2004) showed that the growth of OA journals originated from the challenges that university libraries and academics have in being able to afford only a fraction of the 24,000 peer-reviewed research journals available in the world. Some argue that OA is simply a cost-shifting exercise that charges the author rather than the users, whereas others point out that many granting agencies and universities include line-items in budgets for OA publishing (Malakoff, 2003). In my view, if this is cost shifting, then it is exactly the kind of shift researchers and users of research need. Granting agencies want dissemination of the research they have paid for, and universities want to see salaried faculty published. In the strange world of academia, perhaps we need to turn the traditional ‘supply and demand model’ on its head, whereby the suppliers pay for the product while the users receive the product for free. Does it make sense for researchers to bear the cost of publication? The traditional ‘supply/demand’ model does not work in the world of academia because researchers are ‘paid’ in a non-traditional manner through the recognition and utility of their research (Walker, 2001).

## Open Access and Citation/Impact Indices

A number of research articles and reviews claim there is a citation/impact advantage to OA publishing (Lawrence, 2001; Antelman, 2004; Eysenbach, 2006; Holden, 2006), but other research is showing that OA citation counts are difficult to compare to traditional publishing methods for a number of reasons (Craig et al. 2007; Kurtz et al. 2005). Many of us are familiar with the difficulties in using citation and impact indices with paper based journals (Doring, 2007; Lehman et al. 2006), so it is no surprise that using these measures to compare publication methods is less than conclusive.

## Open Access and Promotion/Tenure Decisions

Are OA publications valued by promotion/tenure decisions? What some believe to be the as yet unproven impact/citation properties of OA publications is at least in part responsible for the finding that although two-thirds of scientists read OA literature, only one-third have published their own work in OA journals (Pain, 2007). They read the journals because of easy access and relevance to their research, but avoid publication because they suspect deficient impact factors and less credit in promotion decisions.

---

**Correspondence:** Dr. Jarold L Cosby, Assistant Professor, Applied Health Science, Brock University, Ontario, Canada.

 Copyright in this article, its metadata, and any supplementary data is held by its author or authors. It is published under the Creative Commons Attribution By licence. For further information go to: <http://creativecommons.org/licenses/by/3.0/>.

Interviews of health scientists have found similar results, showing that researchers focus on the perceived journal quality to determine where they will publish (Shroter, Tite, Smith, 2005). Because open access journals have almost all been launched in the past 5 years, OA reputations have not yet been developed that can compete with hundred year old print journal traditions and reputations. I believe we have been asking the wrong question by comparing brand new OA journals to the oldest and most trusted scientific sources. Instead, the question we should be asking is: do you trust an OA journal that is 3 years old as much as you trust a print journal that is 3 years old?

## **Unexplored Education and Research Values of Open Access in the Health Services Field**

Within my own work, and through informal discussions with colleagues and graduate students, there are research and educational values to OA journals that have not yet been explored in the literature. The absence of page and appendices limits provide unprecedented detail and long references lists that allow both students and faculty to learn so much more than can be gleaned from print articles that limit every aspect of a publication.

The ever-shrinking print journal space is creating another limitation in health services research. It provides no scope for one of the most fundamental principles of research: replication. Graduate students in the health sciences are becoming increasingly frustrated as they try to learn a given field through scientific publications that do not allow more than 10 citations in an article. So, they see the same few references again and again, quickly coming to the erroneous conclusion that little new work is occurring in the field. Colleagues from around the world tell me that they turn to OA publications to ‘get graduate students up to speed’, as introduction and discussion sections are often long and comprehensive, offering reviews of the literature that can only be matched by systematic reviews (and all too often, such reviews do not exist in the a graduate student’s cutting-edge field of interest). As well, multiple tables and appendices allow graduate students to re-analyze and carefully assess all the details of a complex, multidisciplinary 5-year study, rather than the few highlights commonly provided for in a print journal.

By its very nature, health services research is multidisciplinary and complex, bridging research between many fields and applied settings. In fact, health services research is as often driven by problems in applied settings and issues with policy as it is by curiosity and theory. It is common to see a health services research project that includes disciplines as diverse as neurosurgery, anthropology, and geography. OA journals allow these diverse researchers to ‘test the waters’ quickly and without cost in a field that is new to them. They can peruse a series of full text articles for free, gaining knowledge of terminologies and definitions that are simply not available in 200 word abstracts. In my experience, OA articles often fuel synergies in multidisciplinary health services research projects.

## **Health Services Insights is a New Open Access Journal**

I am pleased to announce the launch of *HEALTH SERVICES INSIGHTS*—a new peer reviewed open access journal published by *Libertas Academica*. It is our objective to provide a home for timely, high quality insights into the myriad of health service issues faced around the world by policy makers, scientists, health practitioners, and the public. In this inaugural article, I would like to discuss the two strengths of this new journal; an integrative perspective of health services research, and an open access peer reviewed forum for synergistic information sharing that supports research and applied decision making.

## **Open Access and an Integrative Perspective of Health Services Research**

First, there is a real need for an integrative perspective on health services research (Graham et al. 2006). Although many fields can benefit from sub-specialized journals emphasizing a few theories and methodologies, by its very nature health services research draws on disciplines spanning the social sciences, natural sciences, health sciences, humanities, economics, and even business. Because the demand for scientific insights into the complex arena of health problems far outstrips the supply, *Health Services Insights* fills an important niche in research dissemination. By providing integrative insights into existing and newly arising

health services problems, we hope to facilitate exciting advances in methodological and theoretical research.

## **Open Access and the Science of Perpetual Change**

Health services research exists in a complex evolutionary environment that has been referred to as the 'science of perpetual change' (Haines, 1996). Researchers need timely information that is not hampered by traditional publication delays. The second strength of *Health Services Insights* is the open access forum. Open access means that all articles are freely available to all, worldwide, and at no cost to the reader. Peer review is undertaken by at least two leading experts in the area of the manuscript. All *Health Services Insights* articles will be available for free on the internet, and this freedom is coupled with rigorous, fair and prompt standards of peer review. Authors retain copyright of their work and can grant anyone the right to reproduce and disseminate it, provided that it is correctly cited and no errors are introduced, under the Creative Commons "CC-BY" licence.

Articles in *Health Services Insights* will follow a consistent format so that the visual impact will be high and equal to that of the best hard-copy publications. The electronic format allows the full use of digital technologies and permits the inclusion of large data sets, from field and laboratory studies, links to other web pages, animations, slide shows, video clips and unlimited colour, all at no additional charge. In hard-copy journals, the costs of publication are met by subscriptions, paid by the reader. In *Health Services Insights* these costs are borne by the author in the form of a publication-processing fee. Many grant-awarding bodies recognise the value of open access publishing by allowing their funds to be used for fee waivers. As well, we have made a commitment to attempt to make discounts available on a case-by-case basis to ensure that lack of funds does not impede the overall objective of publishing

the best science, irrespective of authorship or country of origin.

## **The Future of Health Services Insights Open Access Journal**

Although there are many concerns and issues surrounding print and open access journals, the simple truth might lie within complacent co-existence. The scientific field of health services research was founded upon and successfully grew within a traditional print media environment. As this environment changes and new evolutionary advances are made in electronic media, open access may simply be the next logical step in the adaptation to the demands of the creators and users of research.

I look forward to my role as Editor in Chief for *Health Services Insights*, as we strive to attract manuscripts of the highest quality that are of the greatest possible benefit to readers within this new and exciting media context.

## **References**

- Antelman, K. 2004. Do open-access articles have a greater research impact? *College and Research Libraries*, Sept, 372–82.
- Craig, I., Plume, A., McVeigh, M., Pringle, J. and Amin, M. 2007. Do open access article have greater citation impact? A critical review of the literature. *Journal of Informatics*, 1:239–48.
- Doring, T. 2007. Quality evaluation needs some better quality tools. *Nature*, 445:709.
- Eysenbach, G. 2006. Citation advantage of open access articles. *PLoS Biology*, 4(5):e157.
- Graham, I. et al. 2006. Lost in knowledge translation: time for a map? *Journal of Continuing Education in the Health Professions*, 26(1):13–24.
- Haines, A. 1996. The science of perpetual change. *British Journal of General Practice*, 46:115–9.
- Harnard, S. et al. 2004. The access/impact problem and the green and gold roads to open access. *Serials Review*, 20:310–4.
- Kurtz, M., Eichhorn, G., Accomazzi, A., Grant, C., Demleitner, M., Henneken, E. and Murray, S. 2005. The effect of use and access on citations. *Information Processing and Management*, 41:1395–402.
- Lawrence, S. 2001. Online or invisible. *Nature*, 411:521.
- Malakoff, D. 2003. Opening the books on open access. *Science*, 302:550–4.
- Pain, E. 2007. Minds closed to open access. *Science*, 315:1479.
- Schroter, S., Tite, L. and Smith, R. 2005. Perceptions of open access publishing: interviews with journal authors. *BMJ*, doi:10.1136/bmj.38359.695220.82 (published 26 January 2005).
- Walker, T. 2001. Authors willing to pay for instant web access. *Nature*, May, 411:521–2.