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Editorial

Open, Online and Global

Benefits of BioMedical Journals Going Online and Open

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Open Access Archive: <http://cogprints.ecs.soton.ac.uk/view/subjects/OJHAS.html>

What is the point of scientific research if the results are not shared freely? This question has become the epicenter of thought internationally as a good number of scholars are being categorically denied access to vital research information that could create a difference- and in the health domain, it is most often between life and death. For scholars from poor and developing countries, this has been even worse.(1)

Well, why is this question so significant now? There have been scientific journals before and they probably will continue to exist. But the so-called 'serials crisis' has taken a significant impact just now, with the omnipotent Internet affording cheap access to information. The unique crisis, which is by itself a vicious circle of increasing prices and lower access, has taken its toll. Even well funded universities of affluent societies have been worst affected- not to mention those in poor and developing countries.

Omnipotent Internet and Online Journals - A brief Overview:

In the pre-Internet era, paper afforded the best communication media and print media offered the best visibility any scholar could afford to have. The emergence of Internet as a worldwide network capable of multiple interactions within has changed the scenario.(2) Internet offers distribution of entire

manuscripts to an unlimited audience, with virtually no extra cost than for the preparation of the first draft.

Being digital also affords the immense possibility of being indexed, linked, copied, archived, redistributed and searched at ease and at a lower production cost.(3) The initial success of Online Journals- which were often digital versions of print journals - can be attributed to this. The immense possibility also paved the way to the emergence of Online-Only Journals like the Online Journal of Health and Allied Sciences (www.ojhas.org) - the pioneer online biomedical journal in India.

The Internet era also witnessed scholars taking an upper hand in disseminating scholarly articles, with groups of scholars founding new Online Journals and showcasing research to an ever wider audience, and that too at meager cost and driven by passion and dedication.

Open Access Movements:

Since most of the journals that went online were owned by commercial publishers, taking advantage of technology to widen their market potential, most of the scholarly articles that went digital went behind the virtual barriers of toll-based access almost eternally. The scientific community at large would not take any benefit of this move. This fact paved way to the rise of Open Access movements

spearheaded by the Budapest Open Access Initiative (BOAI)(www.soros.org/boai) and the Public Library of Science (PloS)(www.plos.org). The movements were enriched by thought and discussions from around the globe mainly by networked communication on List-serves and public meetings.

'Open Access' means immediate, permanent, toll-free, non-gerrymandered, online access to the full-text.(4) This would enable research to be freely exchanged between scholars.

Open Access Archiving:

Open Access archiving offers immediate solution to the need to free scholarly communication from the shackles of access barriers. Since 1991, high energy physics researchers from around the world were networked through an eprint archive maintained by Paul Ginsparg of Los Alamos National Library (later moved to Cornell University which currently hosts the archive). This archive- 'arxiv' (<http://www.arxiv.org/>) receives two-third of its total hits from institutions outside the United States, including many research facilities in developing regions. The archive has become indispensable to researchers in research institutions that would otherwise be excluded from the front line of science for economic and other reasons.(5)

The success of Arxiv had its impact worldwide and led to the creation of the Open Archives initiative which has developed E-Print (www.eprints.org) software which would enable interoperability between different archives encompassing different specialties. The OAI has also developed an Open Archives Metadata Harvesting Protocol (OAMHP) which would enable interoperability across distributed archives. Thus the distributed archives form a networked global library that enables cross linking, searching and permanent archival of meta data enhanced manuscripts. Moreover these data are available for seamless search and other features supported by Open Archive search engines like OAIster (<http://ocister.umdl.umich.edu/o/ocister>).

The new wave has swept through the biomedical domain too, with a number of institutional and centralised archives like Cogprints (<http://cogprints.soton.ac.uk/>) being established. Here the works of the US National Library of Medicine through the PubMedCentral (www.pubmedcentral.com), which is now integrated through the OAMHP, and other archives like the Clinical Medicine Netprints (www.dinmed.netprints.org) maintained by the BMJ publishing Group and E-Research archive (ERA) by the Lancet are worth mentioning.

The Three great pillars to Open Access:

Open Access can be considered as borne on three major pillars of Open Access Publishing, Open Access Archiving and Open Access Support. OJHAS fulfills all the three through publishing the journal Open

Access, archiving it openly at Cogprints- a central repository on Cognitive sciences and promoting authors to self archive the manuscripts as they wish on their own websites or institutional repositories by letting the authors retain copyrights of their manuscripts.

We feel that by upholding all the major principles for seamless exchange of research communication, we could serve the global community effectively. Moreover, the enhanced visibility and additional features like cross citations afforded through archiving PDF reprints at Cogprints will take us far ahead in effectively communicating with our target audience- Biomedical researchers.



Open Access - What we achieved:

Becoming Open Access has earned us increased visibility in terms of increased traffic to our websites and an increased number of websites linking back to us. In our experience, the visibility that we enjoy today cannot be afforded if we were a toll access or print journal without heavy investment. Our site statistics speaks on this fact. (Tables 1 and 2)

Table 1: Summary of Site Statistics of the first 150 days of OJHAS being Open Access

	Totals
Unique Visitors	3035 (61.16%)
Visits incl. Reloads	4962
Reloads	1927 (38.83%)
Visitors via Referrers	1215 (40.03%)
Website Referrers	254

Table 2: Breakup of visitors by continent

Continents	Unique Visitors	
Unknown	1898	62.53%
North-America	695	22.89%
Europe	295	9.71%
Asia	71	2.33%
Australia	44	1.44%
South America	17	0.56%
Africa	10	0.32%
Central America	5	0.16%

We also noticed a spurt in our ranking on Google, which is partly due to increased incoming links to our Journal. This affords better visibility of our articles on Google. Similarly OJHAS affords good visibility on other search engines.

How Journals from Developing Countries can gain by being Online and Open Access:

Biomedical research in developing countries are characteristically featured by low visibility. This is primarily because journals lack an international audience. It has been taken note of that, while 25% of all researchers live in developing countries, they contribute less than 3% of the total scientific articles published.(6) Moreover, most of them remain entrapped in geographical, economic and other barriers. The consequent low impact makes it vulnerable for market forces which compete for the best articles. Being Online and Open would simply make the difference. The traffic to websites of startup BioMedical journals from India like the Calicut Medical Journal outnumbered the subscription of the largest circulating biomedical journal in the region. Moreover it would pave way for equitable distribution of vital research results. It also helps in effectively disseminating region-specific health information, which is vital to clinicians and researchers working on regional problems and which affords fewer audience Internationally.(7) Similarly the advantages of Open Access archiving has been extensively discussed.(5)

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Now and Next:

Open Access publishing is perhaps the future of scientific communication(7) in developing countries. The landmark success of many new open Access Journals in India and other developing countries speak for this. The sad fact is that most publishers are not really aware of the new perspectives offered by Open Access and are often reluctant to convert their existing publication to Open Access. Since most scholar societies interested in experimenting with Open Access Journals are little aware of the intricacies of this domain, a support organisation comprising of Open Access publishers is the need of the day. This would enable more Open Access Journals from developing countries emerge successful, both regionally and internationally. This would help disseminate research from developing countries more effectively.

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Competing Interests:

The author is Editor in Chief of two Open Access International Biomedical Journals (*Internet Health* www.internet-health.org and *Asian Student Medical Journal* (www.asmj.org) and editorial board member of two Indian Open Access Journals (*The Online Journal of Health and Allied Sciences* www.ojhas.org and *Calicut Medical Journal* www.calicutmedicaljournal.org). He is a contributor to Open Access WebLog <http://www.earlham.edu/~peters/fos/fosblog.html> and a consultant to many Open Access Biomedical journals