

Open access publishing – Experiences with the Online Journal German Medical Science

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The discussion on open access was intensified by the fact that the budgets of university libraries have stagnated while at the same time prices of journal subscriptions have risen up to 10 % in the last 10 years. With more than 20.000 scientific journals world-wide and almost 1.5 million scientific articles each year it was obvious that in February 2002 the “Budapest Open Access Initiative”¹ and in October 2003 the “Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities”² demanded a free and gratis access to original scientific research results, raw data and metadata, source materials, digital representations of pictorial and graphic materials and scholarly multimedia material.

GMS – The beginning

This demand was taken up in December 2002 from the Association of the Scientific Medical Societies in Germany (AWMF), the German Institute of Medical Documentation and Information (DIMDI) and the German National Library of Medicine (ZB MED) when they signed a co-operation agreement to edit the electronic journal German Medical Science (GMS).

The following objectives were defined:

- Increase German publications among international literature
- Offer an alternative to journals’ impact factors
- Strengthen the authors’ copyright
- Reduce the editorial costs of scientific publications
- Accelerate publishing and acquisition of literature
- Continuous archiving on reliable servers

Just seven months later, in July 2003, the first publications in GMS were accessible on the Internet at www.egms.de

Concept and Partners

GMS, a portal and international interdisciplinary e-journal, offers open access to high-ranking and quality-reviewed medical articles. It is aimed at all professionals in the field of medical science, health sciences and research. Its intent is to propagate the high-quality research in medical science world-wide. All articles published in GMS are accessible immediately, permanently and free of charge for everyone in the world. Most articles are published in English after they have been peer-reviewed by experts.

The editorial board of GMS is provided by the AWMF with its 151 Learned Societies and more than 150.000 members from all fields of medicine.

The ZB MED is responsible for the editorial work and marketing. It is the largest medical library in Europe and has a stock of more than 1.3 million volumes and 18.000 journals from which 7.800 are under current subscription. DIMDI offers more than 70 medical databases, information systems for drugs, medicinal products as well as health technology assessment and edits medical classifications in German. This partner of GMS guarantees the technical realisation and provides permanent access and citeability of the electronic documents with the archival storage on its highly secure servers. Besides interdisciplinary original and review articles, GMS publishes the e-journals of individual member associations of the AWMF under their own titles with scientific original papers and surveys from each specific field.

Six journals with active publications have been incorporated since the start of GMS and ongoing negotiations are as well aimed at introducing five new journals on its portal.

The portal additionally serves as a platform for public and internal communication among the member associations and for the publication of electronic proceedings.

It is an advantage for the authors to publish free of charge and keep the copyright. Furthermore, they can enrich their articles with high-resolution pictures, extensive charts, sounds, films, complete research databases or other data.

Software

The software of GMS is built on the basis of a modular system:

The authors and Learned Societies submit their manuscripts quickly and free of charge by using the web-based Manual Operating System (MOPS). The MOPS controls the workflow of the manuscript submitted until it is accepted or finally rejected. The composer formats Word- or other textfiles to XML and produces pdf-files.

The Publication System (PUBS) is responsible for the final publication on the DIMDI-server.

The average time span from submission to publishing or returning to the authors for revision is 45 days.

Financing

At the initial phase (2002/2003) GMS was funded by the German Research Foundation (DFG) and by the German Federal Ministry of Health and Social Security (BMGS) with approximately 360.000 € for the development of a prototype.

In the consolidation phase (2004/2005) the DFG has allocated funds for setting up a business plan. This business plan is designed to manage the relevant costs for IT (current and investments), production, management and operational costs.

In the future users will have free access but will have to pay for print material. Congress organisers (mostly Learned Societies) will contribute per congress report or abstract. Learned Societies will have to pay for Society journals according to the service level used (generating funds from membership fees or from their authors).

Statistics

Up to the present, 138 articles have been published on the portal of GMS.

The high number of rejected articles reflects the thorough review process every contribution is subjected to.

The number of site visits has risen from 18.221 in July 2003 to 135.865 in June 2005.

According to experts, open access journals will have a market share of 30-40 % in the next 5 to 10 years. It is currently under 10 %.

According to a recent publication in the German press³, the number of publications by Brazilian scientists in international journals has tripled between 1985 and 1999 and Brazil has moved up to one of the 25 leading and active research nations. In the field of medical bioethics Brazilian scientists have increased their publications in an impressive manner.

So why don't you – and it is self-evident that I include all other nations too – encourage your scientists to publish in open access journals like for example: in GMS?

I would like to round up with the words of Johann Wolfgang von Goethe:

“Knowing is not enough; we must apply. Willing is not enough; we must do”

¹ Budapest Open Access Initiative. Available from: <http://www.soros.org/openaccess/g/read.shtml>

² Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities. Available from: <http://www.zim.mpg.de/openaccess-berlin/berlindeclaration.html>

³ Wüsthof, A. Das grüne Wunder von São Paulo. Die Zeit. 2005 June 30; 27: 36