

SciELO and Scientific Publishing in Latin America

Moderator and Reporter:

Mauricio Rocha e Silva

Clinics

São Paulo University Medical College

São Paulo, Brazil

Speakers:

Abel L Packer

BIREME (Latin American and Caribbean Center on Health Sciences Information)

São Paulo, Brazil

Rogério Meneghini

BIREME (Latin American and Caribbean Center on Health Sciences Information)

São Paulo, Brazil

Lewis Joel Greene

Brazilian Journal of Medical and Biological Research

São Paulo, Brazil

SciELO (Scientific Electronic Library Online, www.scielo.br), begun in 1997 as a virtual health library, networks information sources, institutions, and individuals who act as sponsors, producers, intermediaries, and users of scientific information. Originally meant to include only open-access journals edited in Latin America and the Caribbean, it has expanded to include Spain and Portugal. The SciELO collection has certified 283 journals from Brazil, Chile, Cuba, Spain, and Venezuela and is certifying 84 from Argentina, Colombia, Costa Rica, Mexico, Peru, Portugal, and Uruguay. SciELO's conditions for journal certification generally follow PubMed rules, with the additional proviso that each journal supply free open access from the moment of publication.

The goals of SciELO are to improve the performance and quality of national journals by increasing their visibility, accessibility, use, and impact; to operate as an

index for bibliographic control; and to provide bibliometric indicators, complementing the Institute for Scientific Information (ISI) *Science Citation Index* and other international evaluators.

The number of downloads of full papers from SciELO increased from 3250 in 1998 to 1.8 million in 2002 to 42.2 million in 2005. Most downloads are by users in Brazil, but the proportion from first-world countries (especially the United States) has increased over the last 3 years.

Submission to SciELO journals by local authors has increased. The previous invisibility of regional journals meant that local scientists capable of publishing in the first world almost never published locally. Over the last 5 years, the number of articles submitted to SciELO journals has increased by 60%; these journals now include papers from some of the best scientists in the region. The number of citations has also increased. Of the 42 ISI-registered journals in Latin America, 28 have been certified by SciELO. Over the last 5 years, the impact factor of the SciELO-certified journals increased by 43%, and that of the non-SciELO-certified journals, 10%. Immediacy and half-life also increased, but SciELO and non-SciELO journals have not been compared in these respects.

The increased impact in the region during the last 5 years correlates with the number of newly indexed ISI journals, the number of journals with commercial publishers, and the number with titles that do not "betray" the country of origin. Publication in English does not appear to increase impact, nor does the number of articles by authors from countries other than that of the journal.

The question of having national scientific journals was discussed. Such journals were said to be important to

- Preserve the memory of local science.
- Inform scientists and society of scientific progress.

- Define and enforce quality criteria for performing and publishing science.
- Publish research of national or regional interest.
- Communicate research results to the rest of the world.
- Stimulate the development and consolidation of research fields by editorial assistance and policy.
- Train reviewers in analyzing and criticizing scientific papers.
- Give authors detailed criticism and assistance in preparing manuscripts.

SciELO and open access have increased readership and citation of some journals published in the region. However, visits to and downloads from SciELO are largely Brazilian and show a bias toward countries where Romance languages are spoken. That is not unexpected inasmuch as Brazil is the most populous nation where Romance languages are spoken and www.scielo.org is a consortium of countries with Romance languages. SciELO must increase its penetration of the international community and make known to the rest of world that about 50% of its texts are in English.

It is believed that SciELO will progress only by linking to public policies to strengthen scientific research and communication and the international open-access movement from the perspective of developing countries. SciELO hopes to position developing countries' journals in the international flow of scientific information. Parts of the Salvador Declaration on Open Access address challenges that developing countries face in joining the interchange of the international scientific community and how open access, driven by developing countries, can help. 