

HINARI: Health InterNetwork Access to Research Initiative

HINARI (Health InterNetwork Access to Research Initiative) is a programme in which many leading biomedical publishers, working closely with the World Health Organisation, allow free or very low priced online access to more than 2000 key biomedical research and healthcare journals. Announced by the Director General of the WHO in July 2001, Phase I went live in January 2002 followed by the second phase in January 2003. It is entirely voluntary and fulfils the urgent need in developing countries to access published research in biomedicine and healthcare. HINARI also aims to assist in the publication of research conducted in the developing countries both in local journals and in the international literature. The programme is comprehensive, targeted to specific institutions, independent of funding, available to more than 100 countries, technically simple, based on co-operation with the National Library of Medicine and Yale University, and hopefully, fully sustainable.

BARBARA ARONSON

World Health Organization

MAURICE LONG

BMJ Publishing Group

"As a direct consequence of this arrangement, many thousands of doctors, researchers and health policy-makers among others will be able to use the best-available scientific evidence to an unprecedented degree to help them improve the health of their populations. It is perhaps the biggest step ever taken towards reducing the health information gap between rich and poor countries."

Dr Gro Harlem Brundtland, Director General WHO, London, 9 July 2001

HINARI – How it began

The origins of HINARI go back to December 1999, when the World Health Organisation surveyed biomedical researchers in developing countries to identify their chief concerns. More than 900 respondents identified two key needs: first, access to research in the important and invariably expensive medical journals published in the North; secondly, assistance in having their own research published. Almost one hundred of these same researchers met in Annecy, France, in April 2000, and in September of that year, the British Medical Journal, having been represented at the Annecy meeting, devoted a special issue to the topic of research information exchange between the developed and the developing countries.

In early February 2001, after being contacted by

Barbara Aronson, one of the librarians at the WHO in Geneva, the editor of the British Medical Journal, Dr Richard Smith offered the BMJ resources to the WHO to assist in developing a low cost access programme. Barbara explained that Kofi Annan, Secretary General of the UN, had proposed setting up the Health InterNetwork (HIN) in his Millennium Report "We the Peoples", in April 2000, and the World Health Organisation had been asked to become the lead UN agency in establishing HIN. The idea was simple. Good qualitative medical research was being conducted widely in many developing countries. The problem researchers faced was very limited access to the information in the key international biomedical and healthcare journals, although more and more of their institutions were gaining access to the internet. However, the cost of subscribing to journals and research databases is usually much higher than such institutions can afford. This in turn made it difficult to have their own research accepted in the leading international journals.

The WHO saw that a key feature of the Health InterNetwork would be access to online information for researchers in the developing nations, perhaps at discounted rates. It had recently taken the lead in facilitating the purchase of anti-HIV and anti-malaria drugs in developing countries at heavily reduced rates. It might be

possible to organise something along similar lines with the publishers. Six major publishers had been identified who between them publish a very large number of biomedical journals – many of them key titles in their fields: Blackwell, Elsevier, Harcourt, Springer-Verlag, Wolters Kluwer and John Wiley. A meeting was arranged with these publishers at the WHO offices in New York, in late March 2001

Michael Scholtz, Special Representative of the WHO Director General, outlined his vision of how the programme could work. The Health InterNetwork was looking to provide access to libraries in two groups of countries: those classified by the World Bank as Low Income, where the GNP per capita is less than \$755 dollars per annum and those classified as Lower Middle Income, where the annual GNP per capita is between \$755 and \$2999. At that first meeting the publishers offered unilaterally to amend the World Bank classification slightly, raising the threshold of the lower group from \$755 to \$1000.

Before the end of the meeting, most of the publishers said they would like to offer free access to qualifying libraries in the Low Income countries without any fee, as long as certain conditions were fulfilled. There would be two key principles: free access would be available only to bona fide, not-for-profit academic and research institutions; secondly that each participating publisher, while adhering to the general principles of the programme would be free to make his own arrangements for any particular country, or group of journals. The publishers also offered voluntarily to include what healthcare journals they published, in addition to their biomedical research. It was also decided that the group would concentrate first on getting the free access organised to the Low Income countries, and that discounted access for institutions in the Lower Middle Income countries would require more consultation. The programme was therefore divided in to Phase 1 and Phase 2.

It also needed a name. It seemed important that it should be seen in the context of the UN's global Health InterNetwork. We had agreed in the meeting in New York that this was more of a programme rather than a project. If it worked it might endure, at least for a few years. It was also a very new idea – independent companies coming together to work with the WHO to set up a

programme which all hoped would be sustainable. Since one of its main purposes was to provide access to important research, in the end, the name suggested itself: the Health InterNetwork: Access to Research Initiative – HINARI. It soon seemed to have a familiar ring about it.

HINARI was announced formally in London in July 2001 by the Director General of the WHO, when a HINARI Statement of Intent was signed by each publisher and witnessed by Dr Gro Harlem Brundtland. Through a remarkable degree of collaboration between technicians and managers at the publishers and the WHO, Phase 1, offering free access to WHO-approved institutions in countries where the annual per capita GNP is less US\$1000, went live 31 January 2002, less than a year after the first tentative meeting in New York.

Other publishers join

Once the concept of HINARI had been developed, and as soon as it was shown that it could work technically, many other publishers joined the programme. This not only broadened the content being offered, but brought much valued insights to its development and expansion. At the end of May 2002, journals from another 18 biomedical journal publishers were added to the HINARI catalogue, which by now offers access to almost 2100 key journals in almost every range of medical and healthcare specialty.

HINARI Phase 2

Phase 2 was launched in January 2003, providing access to WHO-approved institutions in countries where the GNP is between \$1000 and \$3000. Although this is a little more complex than for the Phase 1 countries, in principle institutions will be able to gain access to the HINARI 'catalogue' for a single annual payment of US\$1000. Because of existing strong markets, some publishers might exclude access from some countries to some or even all the journals. On the other hand, some HINARI publishers will continue to allow access to their journals without charge to some or even all Phase 2 countries. In general, though, HINARI Phase 2 offers an outstanding collection of the most prestigious journals at little more than nominal pricing. Further, rather than share it amongst themselves, the publishers have agreed

to plough whatever revenue is collected to training librarians in the use of HINARI. This phase of HINARI is planned to operate in 2003 and 2004, during which the operation of the programme will be evaluated.

What is it? How does it work? Who can benefit?

The key concept in HINARI is access. We decided at the very first meeting that it would not be a hosting service. There seemed to be no point in replicating the journal texts on a special HINARI server, not even for bibliographical information. It was not necessary technically, and it avoided questions of version control. It also left the texts entirely within the control of the publishers. HINARI would simply be a gateway for legitimate users. They would log on to the HINARI portal on the WHO Health InterNetwork server. There, they would find the journals available listed in three ways: alphabetically, in subject categories (still to be implemented) and lastly, by publisher. The server would also offer access to PubMed as a search tool. Indeed, the National Library of Medicine has become a key partner in the HINARI programme.

Yale University Library has also played a critical part in developing the programme. Working closely with WHO personnel in Geneva, Kimberly Parker has developed and continues to manage the journal database behind HINARI. Yale's other key contribution has been to donate their own library's user authentication software. Once authenticated, the user passes on to wherever the publisher houses his text. Many of the larger publishers have their own access software (InterScience, Science Direct, Synergy and so on), and their own servers. Other publishers house their text on contract hosting services such as HighWire and Ingenta, and users pass through the HINARI gateway to these services. Having reached the journal they are looking for, users enjoy all the functionality provided by the publisher. It was a point made by the publishers at an early stage in the discussions with WHO: there would be no degradation of the service offered, even where all access fees were waived. At the article level, users would be able to follow whatever links were available, including CrossRef, to go to wherever their enquiries took them.

Eligible institutions whose staff and students

will have access to the journals have been defined as: schools of medicine, nursing, public health and pharmacy; universities; health/medical research institutes; government offices working in the health sector; teaching hospitals and national medical libraries. For-profit organisations would not be eligible. It was believed that there might be as many as 600 of these scattered throughout the almost 70 countries where the annual GNP per capita is less than \$1000, and a similar number in 40 countries where the GNP is between \$1000 and \$3000.

LIBRARY FACILITIES EXPAND

Can you imagine a nursing library in Nepal having access to 1500 biomedical journals? Recently we became a member of WHO's Health InterNetwork Access to Research Initiative, which gives us free access to one of the world's largest collections online. Thanks to donor Dr. Sunita Chandra, who has provided us with three new Pentium III computers and necessary equipment for internet hookup, our faculty and 800 students can now take advantage of this wonderful resource. Last August we dedicated our new computer laboratory. LDS donors from Hong Kong and Kathmandu were on hand to help us celebrate (see photo). In addition to the computers, LDS provided a fund so articles could be sent quickly by e-mail from the Eccles Medical Library at the University of Utah. We are most grateful to good friends Debra and Preeti Lamsal for their tireless efforts on behalf of our library.

Lalitpur Nursing Campus is always trying to provide more facilities for students and faculty. Every year we are buying new books and discarding outdated ones. Book issues of journals are being bound for easier use of students. Handouts are the computers used for research but students can type and print their reports and teachers can type and print their class notes. There is a system whereby a computer can be locked shared. Most students are able now to use computers and access the internet. A librarian is usually always available to provide instruction and assistance if needed. We are hoping the day will come when we will have enough computers so the certificate students also can use them.

We are currently assessing all our books on the CD library software package so that in the future a card catalogue won't be needed. Students will be able to search for the books they need on a computer and we will be able to check books in and out by an automated system.

-Abhin Thakuri

MY MOST UNFORGETTABLE PATIENT

By
Smita Upadhyaya
Third year student (B.C.C.)

On the very first day of hospital duty as a first year student, I was assigned a patient who will remain in my mind for the rest of my life. It was early in the morning. She was a 70 year old lady with COPD, suffering from severe chest pain and asthma. Lying on the bed, she was struggling to breathe. Making deep, taking long breaths, she seemed to be struggling for life. I was so scared but I started to help her. I had her lean on my back hoping it would ease her breathing. After the minutes had disappeared without her waking. Suddenly she started to breathe faster and I noticed her eyes closed. I was so relieved. The supervisor called the doctor, who ordered oxygen. Finding this usual routine unacceptable, the patient asked me to remove it. When I refused, she became annoyed and shouted at me. Tears rolled down my cheeks, not because she scolded me but because of her pain and suffering.

A short time later a nebulizer was ordered and her condition seemed to improve. She asked for sleep. She apologized to me for being angry saying it was because of her pain caused by the rigors of her battle. I reassured and consoled her as best I could.

By the time I had to leave I felt a kind of bond being built with the lady as one of mine. I asked her family to promise they would take proper care of her while I was gone. After I reached home, my call about her condition could not wait for the day to end. I wrote so early she was running and talk for the hospital. I entered her room and to my surprise, I found a message in her bed. My heart was beating faster when the nurse in charge said "She is not home."

This seems may not seem so wonderful to you but it felt a great work on me. I had never experienced anything like it before. I had felt death in front of my eyes but as a nurse I had been able to help.

The success of a recent HINARI project at the Lalitpur Nursing Campus in Kathmandu is celebrated in this newsletter article, which begins: "Can you imagine a nursing library in Nepal having access to 1500 biomedical journals..."

Usage data

Although it is important for both the publishers and the WHO to gather as much information as possible as HINARI develops, it is made difficult by the fact that few institutions in the Phase 1 and Phase 2 countries have fixed IPs. In January 2003, the WHO will be installing software which will allocate a simulated IP to each Phase 1 country and to each institution in the Phase 2 countries. This will greatly increase the granularity of usage information for the publishers, and it is planned to work with initiatives such as the COUNTER programme to achieve as much standardisation as possible. HINARI users will, of course, enjoy exactly the same degree of confidentiality as any other user.

The user agreement

There are a number of firsts about HINARI Phase 1, and one of those is that there is one single user contract which has been agreed by all the publishers. Its terms are typical of the site licence agreements operating in most libraries in the developed world, although it also recognises the difficulties experienced in poorly resourced institutions. Key clauses include:

Access is available only to bona fide members of the institutions.

Access is denied to for-profit corporations and their staff.

Users may download to a hard disk a limited amount of material from any journal or book.

They may also print out this material – in both cases, no more than 15% of any one book or journal issue.

They may forward this information as documents, but only to bona fide members of their institution.

They are prohibited, as is any library in the developed world, from using the publishers' material as the basis for a document supply business.

The copyright remains at all times with the publisher.

They are not allowed in any way to alter the text.

The institution must monitor the proper use of the site, and prohibit any abuse as far as they are able to.

Beneficiary institutions are expected to maintain their existing levels of expenditure on journal subscriptions.

HINARI and copyright

For the publisher there are clear risks involved in embarking upon a programme as radical as HINARI. It is a measure of the extraordinary trust that has grown between the publishers and the WHO that they are willing to accept WHO as a guarantor for each of the institutions. Through HINARI, it is hoped that copyright will be fully respected in the institutions. Indeed, publishers also hope that programmes such as HINARI will persuade countries which have not yet signed the Berne Convention to do so soon. In this regard,

discussions have already taken place between representatives from HINARI, the International Publishers Association and World Intellectual Property Organisation, and this liaison will continue.

What is special about HINARI?

HINARI is not the only programme or project designed to make information available at low cost or even free to the developing world. For many years, individual publishers have been making specific arrangements to provide low priced books and journals within the developing world. Programmes such as INASP (the International Network for the Availability of Scientific Publications) have been offering various schemes to supply discounted or even free information. More recently, the Open Society Institute's e-IFL project and INASP's PERI have been trying to facilitate online access in specific national and geographic markets. T.E.E.A.L is a significant initiative in agriculture.

However, HINARI has some features worth highlighting.

Independent

First among these is its independence. It is not owned by anyone – it is nothing more than a coming together of some of the key publishers in biomedicine, facilitated by the World Health Organisation. There are no contracts between the WHO and the publishers. There is no formal management Board, and there is definitely no bureaucracy.

Global

With very few exceptions, any country throughout the world with a GNP of \$3000 or less is eligible, irrespective of their location.

Biomedical research and healthcare only

Because it is concerned only with biomedical and healthcare information, it has a clearly defined focus, which makes it easier for publishers to commit themselves to the programme.

Clearly defined users

The criteria for identifying which institutions would benefit from access to HINARI were simple, and readily agreed by all parties,

dependent only on published World Bank data. This also made it easier for publishers to commit themselves to the programme.

Comprehensive

As at 31 December 2002, there are almost 2100 journals available. New publishers are looking to join the programme. It looks set to be the most comprehensive collection of biomedical information available anywhere in the world.

Not dependent on funding

Because the publishers are making this information available from their own resources, there is absolutely no dependence on third party funding. However, it is hoped that other agencies will assist in supplying the computer and connective equipment where it is needed.

Technically simple

Since HINARI is nothing more than a gateway through which users will pass, it is very simple as regards technology, requiring little infrastructural investment either for the WHO or for the publishers, and most important, for the libraries.

Built on trust

A unique trust has grown up between the participants. Points which might have seemed impossible to negotiate only a short while ago have been agreed because of this trust.

Protection of business interests

Within HINARI, publishers can opt out of the agreement for specific markets or topics where they already have established markets. It is not a one-size-suits-all operation.

Library partners

One enormous strength of HINARI is that it is a broad partnership. Not only have publishers made their material available, key institutions such as Yale University Library and the National Library of Medicine have made essential contributions to the programme.

Enduring

For all of these reasons, HINARI might meet the most important criterion of all – it looks set to be sustainable.

Where will HINARI go from here?

HINARI is not the answer to every problem about information in the developing countries, and it is far from perfect. There remain severe limitations as regards the cost and technology of connectivity in many of the countries. Through WHO, the IPA and other organisations, HINARI will lobby to redress these problems.

There are even those who worry that it might provide too much rich information too fast, that it might be better to offer information that was somehow filtered or more tailored to suit the needs of individual researchers working on specific projects. We would only say that developing the targeting and filtration tools might have taken a very long time indeed and not only would it be costly to develop such programmes, it could prove to be an administrative and organisational nightmare. Moreover, HINARI addresses the need for researchers in developing countries mentioned earlier to access high value research publications.

As the programme progresses, we expect it will offer increased content as more and more information providers join. Electronic books and databases, as well as new search tools, will almost certainly be added. The design of the portal and the functionality it offers is also bound to change and develop over time. We might also see similar initiatives being adopted in other areas where international co-operation is required. Discussions between publishers and the Food and Agriculture Organisation are already under way.

The programme will continue to be led by WHO, and the participation of libraries such as the NLM and Yale will always be critical. In a broader sense, we will need the support of the entire library community. Digital information, far from being some sort of almost cost-free by-product of the print, is becoming increasingly expensive to generate and distribute. In effect, therefore, it can only be made available free or at heavily reduced rates if libraries and users in the developed world recognise the legitimacy of the need to bridge the digital divide by tiered pricing. We may be seeing the emergence of a new kind of Social Contract between the information providers and users in the North to assist the flow of information to and from the South.

Encouraging publication research

Much of this brief paper has been an explanation of how HINARI will make research published in the North accessible to researchers in developing countries. We would like to conclude by quoting one of the key points in the Publishers Statement of July 2001: "The publishers hope to work with the WHO in encouraging research publishing programmes in developing nations". Jointly, the publishers and WHO will work with other individuals and agencies to encourage high quality research publication, both in locally produced literature and in international journals. Only when researchers in these countries have found a way to have their research published and read by colleagues throughout the world can HINARI be deemed to have been successful.

URL: www.healthinternetnetwork.net

Appendix: HINARI partners (31.12.02)

American Association for the Advancement of Science

American College of Physicians

American Medical Association

American Society of Hematology

Arnold

British Medical Journal Publishing Group

BioMedCentral

Blackwell Publishing

CABI Publishing

Canadian Medical Association

Cochrane Collaboration

Company of Biologists

Elsevier Science

Kluwer Academic Publishers

Lippincott Williams & Wilkins

Massachusetts Medical Society

National Academy of Science

National Library of Medicine

Oxford University Press

Portland Press

Royal Society of Medicine

Royal Pharmaceutical Society of Great Britain

Sage

Springer-Verlag

Taylor & Francis

University of Chicago Press

John Wiley

Yale University Libraries

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