Building an information culture virtually in Asia and Oceania

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Abstract:

HINARI Access to Research in Health programme was conceived in early 2001 to offer developing country institutions free or nominal-cost online access to the world's biomedical literature. Ten years later, HINARI is one of three sister programmes, and the partnership has grown to include three United Nations agencies/programmes, Yale and Cornell universities, more than 190 publishers of all shapes and sizes, the International Association of STM Publishers, Microsoft Corporation, Ex Libris, Swets, and innumerable individuals and institutions who have become champions and ambassadors of the concept.

Almost a quarter of the low-income countries eligible for HINARI are in the World Health Organization (WHO) South-East Asia and Western Pacific Regions and those countries encapsulate the challenges to offering an information service solely through the online medium. The regions contain countries with good library skills but little recent access to online information. The regions contain countries transitioning from low income to low-middle income status with the development penalty that entails. The regions contain countries with ongoing conflicts that can isolate information communities. The regions contain countries where the educated population is quite comfortable with English as the common scientific language and countries where familiarity with English is still rare. Finally, the regions include countries with widely distributed populations creating a challenge for building an information culture and community.

In this paper we share some successes and some failures in generating quick uptake and use of the wealth of information offered through the HINARI programme. We review some of the different challenges encountered by an online library in building awareness, overcoming information illiteracy, growing the collection and evaluating impact. We share some case studies from countries in the region. We also discuss opportunities for empowering the library communities in the eligible countries to meet the challenge of information adoption and go beyond what the HINARI programme offers.

Context

When the HINARI programme for Access to Research in Health (HINARI) was launched in July 2001, internet access in the World Health Organization (WHO) South-East Asia and Western Pacific Regions was still a fairly recent phenomenon. At that time, the concept of remote library service via the internet was a novel concept. It is difficult to imagine now how groundbreaking was the thought of providing a health library to low and middle-income countries solely through online means.

Since that time, of course, the many possibilities of remote and virtual libraries have been and continue to be explored. Those of you who are involved in the Pacific Islands Association of Libraries, Archives and Museums (PIALA) or in HELLIS know better than anyone the diversity of libraries, librarians, and information resources available that can be found when one takes a closer look at the South-East Asia and Western Pacific Regions.

However, the question is not so much the diversity of experiences or realities, but instead what we can learn from the diversity, and where the growing capabilities in the space of virtual and remote libraries are leading the library communities.

> Libraries in the Western Pacific Region are undergoing lots of improvements in their infrastructures, library/information management systems, services, and capacity-building activities, not only for their staff but also for their patrons, in the light of new innovations and developments in Information and Communication Technologies. These improvements in some developing/least developed countries may not be so fast due to limited resources; however, there is the will and effort to embrace the inevitable changes. With support from foundations, grants, NGOs, and other organizations, as well as the active participation of library associations, not so well-developed libraries in Western Pacific Region will eventually be transformed into active catalysts for information retrieval and dissemination that will cater to the needs, not only of their staff but also of others beyond their boundaries.[1]

A Decade of Change

The Vice-Rector at a university in Viet Nam during an interview for the HINARI user experience review of 2010 noted that when he prepared his thesis in 1996, he needed to take advantage of visits to France to access key articles Now his university has 350 teachers and they are all reliant on HINARI.[2] This is not a unique experience when talking to HINARI users whose professional lives began more than a decade ago. Easily available information accessible via computers is something that is still hard for them to take for granted.

How did HINARI begin? It began with the voicing of a need. In a World Health Organization (WHO)-led workshop, developing country researchers "agreed that without access to top quality, timely and reliable information of the kind exemplified by the major journals, it is very difficult to do quality research or train researchers."

Following quickly on the expression of need came an idea - that the internet could make it possible for publishers to offer published literature to the developing world for free, when such generosity with printed materials was less feasible.

In July 2001, WHO and six major biomedical publishers joined forces in the HINARI partnership, and thereafter the partnership rapidly expanded in terms of countries, publishers, and journal titles. HINARI launched first in 69 countries, with almost 1500 journals from the initial six publishers. Now HINARI is available in over 100 countries, and more than 7400 journals are offered by 200 publishers. In addition to journals, HINARI offers 400 online books, 15 databases and 20 reference works in biomedicine and related social sciences.

Before 2000, the majority of low and middle-income country libraries struggled to provide viable library services. A few major institutions had the funds to subscribe to a small set of major scientific journals. Others were lucky to have exchange programmes in place or an "angel" who had adopted the library or the institution. Still others had shelves with nothing on them or materials that were old, with gaps and with materials provided in languages that few could use. And there were large numbers of institutions without any libraries or library services at all.

Change can take place rapidly, even if we look back just 3 years (and not a full 10 or more years). In August 2007, the Pattan Hospital Library/Nepal had 1 computer and a phone line modem. In October 2010, the hospital had 40 desktop computers and a direct line to an ISP. They have just started a Medical School.[3] Another example of change comes from Bhutan. During initial training events, users expressed simple gratitude for access to the wealth of information resources available to them in HINARI, during later training events, they emphasized a desire for tools and functionality that they don't yet have.[4]

Librarians in a New World

So, what do these kinds of changes mean for libraries and those providing the library services? Firstly, there are an amazing number of entrepreneurial librarians in the regions today. Libraries are launching institutional repositories for the research output of their institutions.[2] Librarians are holding regular information literacy training opportunities for their patrons.[5] Libraries are developing union catalogues of serials to facilitate electronic document delivery.[1] Librarians are involved in online course support via Moodle, Blackboard and other tools[5] and are providing guidance on how to get published.[4]

In the process librarians in low- and middle-income countries are learning a lot of new skills and capabilities and learning them right along with or in advance of their colleagues in high-income country libraries. For example, in 2008 and 2009, two HINARI online courses were conducted via the Pacific Open Learning Health Network. POLHN provides online and hybrid courses, course materials and health information to health professionals in the Pacific Island countries on its website at http://www.polhn.org. The two HINARI courses contained the same comprehensive material as an in person workshop that was conducted at the Fiji School of Medicine in August 2008.

The workshop course material was translated into a format acceptable for the Moodle Course Management System. This is a free web application used by POLHN to develop the numerous online courses for the Pacific Island countries. The initial course was conducted over 2 months while the 2nd course was scheduled for 6 weeks. Both courses used the Moodle program to manage and grade the course.

The skills needed to develop and offer an online course range from basic design features to physically conducting the course online. Lenny Rhine, who was the trainer developing and

conducting the course, commented about the difficulty in conducting online courses that progress over lengthy periods of time. He also mentioned the still uneven nature of internet access in the Western Pacific Region and the penalty this imposes on doing courses of any significant length in an online environment.[3] This is not news to any of the region's librarians who have been assisting in course support using Moodle or other tools in their libraries.

Another HINARI trainer, Steve Glover, taught a course on health information retrieval in the Democratic People's Republic of Korea in 2010. There is no option for internet access to scientific publications in that country, and yet the availability of Medline on CD-ROM serves as a useful surrogate for identifying relevant articles.[4] Librarians can be quite innovative when faced with the challenges of providing information access to their user communities.

Which Leap and Where?

The fascinating aspect of the current health library environment in the low and middle-income countries of South-East Asia and Western Pacific Regions is where the evolution of libraries and library services is going.

We have all heard about leapfrogging technologies. The most commonly referenced is mobile telephones leapfrogging land-lines and countries that never had many land-lines installed now possessing almost as many mobile telephones as people. The question we are starting to see in low and middle income country libraries is what library services will be leapfrogged and which will still require a sequential progress.

Let us use as an example a hypothetical small hospital that had some shelves for storing publications in the days before it had internet access. The hospital did not have a librarian, simply a secretary who kept things in order as much as possible. Then suddenly the library had access to HINARI and more than 8000 information resources. The hospital staff at first helped each other use the journals in HINARI. Maybe one of them was lucky enough to attend a training workshop. Over time, the information became an accepted part of their work. But whose responsibility was it to keep up with what new resources were available and alert others? Who would train new staff to find and use the information available when someone joined the hospital? Who would connect with other libraries, perhaps at a nearby university, when HINARI didn't have the precise article needed? And, so now either a library assistant is being hired, or a clerk at the hospital is being sent to get training.

The above is a sequential progression from a small information space to something on its way to being a fully fledged library service.

Now let us imagine a library in the Ministry of Health in some hypothetical country. The library was lucky enough to have had a professional librarian identifying and providing information resources as policy questions arose. Then, the library got internet connected and had access to HINARI. Suddenly, the librarian has a lot more time on his hands as policy makers access information resources directly, and he realizes that there is the potential for leveraging all the small reading areas and clerks serving those reading areas in the Ministry of Health offices and departments all over the country. He gets permission to install an open-source chat-reference software function, and suddenly, all the Ministry's staff in out-posted offices can take advantage of his professional searching skills, and the clerks can help with simple questions from anywhere in the country and the retrieval of full text from HINARI at times when the internet is slow or when staff are too busy to retrieve articles themselves. The

clerks begin scanning policy documents and uploading them to a basic institutional repository the librarian has established online, and where the Ministry never had a complete archive of documents from all of its offices, it now has a full set of record of decisions available for consultation when needed.

This scenario is one of leapfrogging. The out-posted offices never had a reference service and now they have a chat-reference service. The Ministry never had a complete archive of policy decision in all the levels of the government, and now it has an online version that can be accessed in all the offices. It is unlikely to develop a paper collection of these policy documents now.

A Brave New World

Even with the options for moving straight into new model of librarianship where user needs are at the heart of library services, there will be challenges and setbacks. There are still many administrators and managers who struggle to understand the value of information and evidence. This is very closely tied to the status of information workers and librarians. With lack of status comes low-pay, poor working environments, uphill battles for equipment, software, offices, and much more.

If more information is more widely available and slowly becomes valued in the culture of an institution, there is a possibility of that value spilling over onto the work of the library or library staff. And yet, there are no guarantees. Widely available information can translate into a perception that there is no need for people who can dig out the information that is not widely available. Someone valuing information does not necessarily mean that same someone will value the person who has created order for that information that has made it easier to discover.

Almost a quarter of the low-income countries eligible for HINARI are in the World Health Organization (WHO) South-East Asia and Western Pacific Regions and those countries encapsulate the challenges to offering an information service solely through the online medium. As the future continues to produce new wonders and new opportunities, there will remain a series of hard challenges. One enormous strength of library communities has been the willingness to share ideas, support, and exchange information. This strength of library communities is most successful when buttressed by administration understanding and support. Even with strong administration support, this strength can be undermined when there are ongoing conflicts that can isolate information communities or when information communities are in geographically enforced widely distributed populations Virtual connections can overcome some of the problem of isolation.

Virtual connections are not a panacea. Stability of environments and in-person opportunities to meet professional colleagues are still key elements of the human interaction upon which we build our library network efforts. A critical component in this picture are trained librarians and trained computer support professionals. Without the necessary training, the professionals supporting the future of information access will receive little support nor respect from those with whom they interact. For some countries and libraries, English as the common scientific language will remain a barrier. The problem is exacerbated by professional health workers who are comfortable in English and library and information workers who are not. These are also challenges for the next stage of our journeys.

This paper has provided a snapshot of what is happening in medical libraries in the South-East Asia and Western Pacific Regions in 2011. Libraries and librarians in the regions are in the midst of a very interesting evolution. We are just starting to see and imagine which aspects of librarianship will be leapfrogged and which will require much effort to progress through. There will continue to be challenges both within librarianship and from within our own institutions and from the external environments in which we by necessity operate. The World Health Organization and the HINARI partners will ensure that a viable set of health and related biomedical resources are available in low and middle-income countries through the next decade. What the libraries and librarians build upon that platform of access will be very interesting to observe.

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[1] Dizon, Julius. Librarian at WHO Western Pacific Regional Office (WPRO). *Personal communication*. 6 April 2011.

[2] Gaible, Edmond. Research4Life User Experience Review Report. [Unpublished report, 2010].

[3] Rhine, Lenny. *Personal communication*. 12 April 2011.

[4] Glover, Steve. *Personal communication*. 8 April 2011.

[5] Gaible, Edmond. Research4Life User Experience Review Report. [Unpublished report, 2010].