Health Information and Libraries Journal

Health Libraries Group | cilip Chartered Institute of Library and Information Professionals

DOI: 10.1111/hir.12085

International Perspectives and Initiatives

Abstract

This is the 12th in a series of articles exploring international trends in health science librarianship. This issue describes developments in health science librarianship in the first decade of the 21st century in South Asia. The three contributors report on challenges facing health science librarians in India, Pakistan and Sri Lanka. There is consensus as to the need for education, training and professional development. Starting in the next issue, the focus will turn to Africa, starting with countries in southern Africa.

JM

Keywords: Asia, South East; case studies; health sciences; India; Librarianship; library and information professionals; Pakistan; Sri Lanka

International trends in health science librarianship part 12: South Asia (India, Pakistan and Sri Lanka)

Trends in healthcare libraries in India: growth and needs

Medha Joshi
Head of Deptartment of Library Sciences
Tata Memorial Hospital, Parel, Mumbai, India
joshimv@tmc.gov.in

It has been a century since the start of library information science education in India, which more or less coincides with the establishment of Indian medical libraries. Several hospitals and institutes have had libraries since their inception, a testament to the vision of their directors and founders.

Post-independence much has changed. There are currently about 6 health care universities, and more than 300 medical colleges and 18 research centres as well as six institutes of national importance working in the area of health care. India's health care industry is growing rapidly. The adoption of new technologies, capacity building and new treatment methods are reshaping health care. Health care institutions must accommodate these developments.

New health care requirements have led to new health care policies. As medicine is an information-intensive field, access to information is recognised as an important priority. Based on the recommendations of various committees, the Government of India indicated its commitment to building libraries. However, this commitment was not translated into action; consequently, Indian medical libraries face difficulties. Waris *et al.*[1]

Despite the harsh climate, some Indian medical libraries have developed, but this has been uneven across the country. A few elite libraries (those of national importance) have done better than the majority. They are the most modern and technologically advanced libraries providing specialised services. A similar disparity exists between urban and rural hospital libraries. The 300 hospitals with a teaching wing for undergraduates and post-graduates all have libraries. These hospitals are either governed by the state or by private trusts or bodies. The other type of health care libraries are those attached to pharmaceutical companies or to corporate bodies.

Prior to the 21st century, demand for specialised information was met by documentation centres, several which were supported by the government. Eventually libraries adopted technologies which enabled remote and online access. As technology developed, user demand shifted from photocopying facilities to online access at the point of care. Technology swiftly moved from CDROMs and floppy disks to remote access and then to online access. Resources likewise altered (for example from MEDLARS to MEDLINE). End-user preferences shifted suddenly from print to online use of information. In India, before one technology could be established and used effectively the next technological development had

arrived. End-users did not use OPAC or remote access; instead, they suddenly moved to online and WEBOPAC. To provide accessible resources libraries migrated to electronic collections.

Government support for medical libraries led to the setting up of a National Medical Library (established in the early fifties, but dedicated as central medical library in 1961). Several information centres for specialised medicine subjects were created in the early sixties and a few earlier (for example NIMHANS for mental health and NICDAP for drugs). The goal of these centres was to create a documentation centre and networks to build capacity and support the information needs of experts. The information centres' initial focus on documentation and control of information from the late 70s to early 80s shifted in the early 90s to distribution and access. Budget constraints, however, made it difficult for libraries to fulfil the demands of end-users.

Eventually, improved technology and user demand pushed libraries to explore e-collections. Libraries were compelled to adopt state of the art technology to improve distribution and access. End-users were liberated from dependency on librarians and physical visits to the library and waiting for print material was avoided. Issues relating to distribution and access, however, were not completely resolved as budget constraint continued. The problem of stretching budgets to accommodate the most needed journals was difficult. This prompted Indian libraries to follow the example of western countries and adopt consortium models. Consortia wrestled with issues relating to terms and conditions in the license agreement. But some government-initiated consortia provided a way of dealing with these matters. Librarians and administrative bodies were quick to notice the ability of consortia to address access issues and make effective use of budgets.

Access to resources: consortia and Information Repositories (IRs)

The three government and university consortia are Electronic Resources in Medicine (ERMED) led by the Director General of Heath Sciences; HELINET (the Rajiv Gandhi University of Health Sciences); and NTR MEDINET (NTR University). The second major development has been the growth of Institutional Repositories (IRs). There are now more than 11 major IRs in subject-specific fields of medicine registered with OPEN DOAR. There may also be few in-house built IRs which are either not registered with DOAR or at a very nascent stage of development. Efforts are underway to develop a subject repository consisting exclusively of Indian publications.

The National Informatics Centre (NIC) of Government of India developed two resources to index Indian medical journals, MedInd (a national level repository) and IndMed. Both are bibliographic databases covering indexed medical and biomedical journals. OpenMED is another open access initiative to archive published biomedical literature; resources are accessible to all and authors are able to upload articles.

LIS education

Even after a hundred years of LIS education universities which offer post-graduate courses do not provide specialised courses in medical librarianship. Although many universities have optional/elective papers in this field, the uptake is low. The Rajiv Gandhi University of Health Sciences University (RGUHS) started a *PG Diploma in Medical Librarianship* a year ago; their first cohort graduated this year. There are quite a few generic PG Diploma courses for librarians run by universities including *deemed* universities which confer their own degrees. Course work usually concentrates on technology applications for digital libraries, the creation of repositories, Open Sources software, etc. None concentrate on skills and knowledge needed by medical librarians (e.g. terminology knowledge, literature searching, database handling and evidence-based medicine). None of the three Indian medical library associations conduct courses for upgrading knowledge or mid-career updating. The Medical Library Association of India (MLAI), established in 1982, has members throughout India, but does not conduct training programmes, though initially it did develop some programmes as well as exchange programmes. There is a need of CME programmes for medical librarians. Many mid-career librarians want to update their

knowledge and skills, and acquaint themselves with newer concepts, and the effective use of various technologies. Farahi & Gandhi[2] observed that professionals need training on the effective use of information technology.

Indian health information professionals face a number of challenges. Medical libraries suffer from inadequate funding and a shortage of, trained and skilled professionals. Librarians have difficulties in evaluating resources, and choosing those which are affordable and provide value for money. The most immediate training needs relate to understanding and meeting user needs; implementing appropriate infrastructure; and dealing with budgetary constraints.

Conclusions

Access to high quality information improves decision making by health care professionals and is a major determinant in the quality of care and improves health for the nation and the world. While elite institutions in India have reasonably good information provision to support scholarly communications, other institutions and most universities struggle to achieve the same outcome. It is difficult to provide users with the material they want, at a time and place which meets their needs. The reason is primarily lack of money. There is a paucity of funds to purchase primary literature, that is, subscription-based scholarly journals Venkadesan [3].

Health Science Libraries (HSLs) face severe problems due to lack of resources, shortage of properly trained staff and escalating cost of journals. There is an urgent need for the Indian government to address the issues being faced by HSLs.

With an expansion in clinical trials libraries need to expand their collection to subjects other than medicine. But at present, libraries are neither encouraged to broaden their collection nor do their budgets allow them to do this. Librarians' workload has increased as a result of ongoing technological changes, an expansion in the range of journals and other materials, along with rising user expectations. In addition, there is continuous reorganisation aimed at achieving more efficient ways of working. With support, and continuous professional development, it should be possible to meet these challenges. Although medical librarians are an unappreciated and underutilised group in India, the expectation is that the National Knowledge Commission's policy on revitalising libraries and its roadmap will strengthen the library profession and HSLs in India.

References

1 Waris, A., Vasanthakumar, M. & Nagaraja, A. Medical librarianship in India: a review of historical developments and current perspectives. *International Journal of Library and Information Studies* 2013, **3**, 56–66.
2 Farahi, M. T. & Gandhi, R. T. D. Adoption of information technologies in medical libraries in Karnataka, India and Iran: a comparative study. *International Journal of Library and Information Science* 2011, **3**, 38–45.
3 Venkadesan, S. Institutional repositories in India. *Serials Review* 2009, **35**, 199–201.

Health sciences information services in Pakistan in the 21st century

Mumtaz Ali Anwar
Honorary Professor
Department of Information Management, University of the Punjab, Lahore, Pakistan
mumtaz@yahoo.com
Midrar Ullah
Librarian & Literature Search Officer
Army Medical College (AM College), National University of Sciences and Technology (NUST), Rawalpindi, Pakistan
midrarullah2007@yahoo.com

Medical education in Pakistan

To understand the challenges facing health science librarians in Pakistan, one needs to review trends in medical education. Pakistan has a proud tradition of medical education dating back to the nineteenth century. The King Edward Medical College was founded in 1860 and the Mayo Hospital was established in 1870. A priority was to provide good college libraries for faculty and students, and reading libraries in hospitals for doctors. Between 1870 and the start of the twenty-first century, medical education and health services both developed slowly but there was a commitment to quality. After 2000, the

Government opened both sectors to private enterprise. As a result, medical education and health care services became money making services which resulted in a rapid expansion in the number of hospitals, medical schools and medical graduates. The number of medical colleges in Pakistan increased fourfold – from 23 in 2000 to 91 in 2014. In 2012, the number of medical graduates reached 171 450. According to an article published in the Lancet in 2013:

'Over recent years the real increase in the number of medical graduates has been due to an increase in the number of private medical schools, which charge higher tuition fees but provide varying quality of education and have essentially become a big business enterprise'.[1]

Unsurprisingly, there were not enough well qualified teachers to cope with such rapid growth. Similarly teaching resources (including libraries) could not keep pace with the enormous expansion in the number of medical students.

Although the Pakistan Medical and Dental Council were responsible for approving and inspecting medical colleges, it lacked the resources needed to perform this role.

'Medical experts and the Pakistan Medical Association have decried the lack of faculty, facilities, and support to train students properly at these institutions'.[1]

As a result of this unregulated and underfunded expansion of medical schools, health information services in Pakistan have deteriorated over the last decade and a half. It is imperative that existing services be critically reviewed and remedial measures taken to improve them. There are three issues which need to be addressed – access to resources; the education of librarians; and better user education.

Access to health information resources

Adequate and timely access to health information resources, especially for research purposes, has always been a problem due to financial constraints. The digital library programme (www.digitallibrary.edu.pk) of the Higher Education Commission (HEC) which subscribes to several important databases with full-text has alleviated this to some extent for non-profit institutions. The Pakmedinet (www.pakmedinet.com), maintained by Pakistani physicians, indexes 75 Pakistani medical journals and is helpful for access to local research. Unfortunately, Pakistan is one of the large, emerging countries which is not entitled to access WHO's free HINARI Programme[2] because most publishers view these markets as important to their business plans. Despite the HEC digital library, there is a need to develop a national virtual health sciences library with an institutional collaborative programme for access to international health sciences information. One might have expected that the Pakistani Medical Library Association would deal with issues facing health sciences information services. Unfortunately, since its foundation in 1984, it has never been very active owing to its limited number of members.

The education of health sciences librarians in Pakistan

Given the tremendous growth in medical colleges and hospitals during the first decade of the 21st century, there is a need to re-examine the future requirements of health sciences librarians and their education and professional development. Pakistan has never had a structured method for properly training health sciences librarians. Out of the twelve universities that offer master's degree in LIS, only two have a course on medical librarianship which, however, is not offered due to a lack of faculty with the necessary background to teach and mentor in this domain. This weakness has been highlighted by Ullah and Anwar[3] who developed and validated competencies for medical librarians in Pakistan. They recommended that 'librarians having pre-medical subjects at the Intermediate and bachelor degrees with biology and chemistry should be encouraged to join the profession' and 'some special courses for medical librarians should be provided as post-professional training' (p. 70).

Introduction of information literacy instruction

One of the themes identified by Ullah and Anwar[3] was the importance of enhancing the competencies of librarians to enable them to provide user education. They identified seven key competencies, relating to user education, where most working librarians require training. A recent national study of information literacy (IL) instruction practices in medical libraries revealed that IL instruction was mostly provided to new students and first time users as and when requested.[4] Only a small number of institutions claimed to have integrated IL instruction into the curriculum without the collaboration of their medical faculty. Face to face instruction, group- or individual-based, conducted at the reference desk, computer lab or lecture hall were the most common delivery methods.

A new and very encouraging initiative took place some 5 years ago when a 3-credit hour compulsory course on 'Information Literacy Instruction' was added to the master's curriculum of a few universities.[5] These graduates, hopefully, will be well-equipped to offer meaningful and effective IL instruction to students, faculty and researchers. However, there is a need to include this course in all the universities and develop its content further using standards and modules based on international practice.

References

1 Ghaffar, A., Zaidi, S., Qureshi, H. & Hafeez, A. Medical education and research in Pakistan. *The Lancet* 2013, **381**, 2234–2236. [Accessed 21 August 2014] http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)60146-4/fulltext

2 HINARI. *HINARI Access to Research in Health Programme*. Geneva: WHO, 2014 [Accessed May 29, 2014]. Accessible from: http://www.who.int/hinari/en/

3 Ullah, M. & Anwar, M. A. Developing competencies for medical librarians in Pakistan. *Health Information & Library Journal* 2013, **30**, 59–71.

4 Ullah, M. & Ameen, K. Current status of information literacy instruction in medical libraries of Pakistan. *Journal of Medical Library Association* 2014, **102**, 9–12.

5 University of the Punjab, Department of Library & Information Science. *Get Quality Education at the Department of Library & Information Science*. Lahore: University of the Punjab, 2013.

21st century medical information services in Sri Lanka

Chandrani Kuruppu
Deputy Librarian
Faculty of Medicine, National Focal Point Librarian/HeLLIS Network, University of Colombo, Colombo, 08, Sri Lanka
kuruppu@lib.cmb.ac.lk

Background

In Sri Lanka, there are 28 medical and health science libraries including academic libraries, research libraries, government libraries, non-government libraries and NGO libraries. The Health Literature, Library Information Service network (HeLLIS) is a key resource for medical librarians. The network is a consortium of health libraries in Sri Lanka and the rest of the South-East Asian region. There are over 350 network member libraries in 11 member countries: Bangladesh, Bhutan, DPR Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand and Timor-Leste. Established in 1980, HeLLIS exercise a major influence on the way health science libraries operate. The stimulus for setting up the network was a WHO Consultative Meeting for the Establishment of a Regional Network of Health Literature, Library and Information Services.

Scope and structure of the network

The purpose of HeLLIS is to promote the sharing of resources among health science libraries in the region. All medical and health service libraries are in the network. The network comprises libraries based in universities, hospitals, professional organisations, research institutions, health departments and special libraries. It operates at two levels: regional and local. At regional level, the WHO South-East Asia Regional Office (SEARO) Library connects to Focal Point Libraries in member countries. Each country determines the structure of its network according to the preference of senior administrators, librarians and users. Network participants are in

direct communication with one another; the Focal Point coordinates activities. Libraries that wish to participate in the network are required to agree to the principle of resource-sharing and engage in cooperative activities.

The objective of HeLLIS is to provide better information services to health care professionals by sharing resources among health science libraries in the region. Network activities are aimed at ensuring easy access to national and regional health information.

The HeLLIS network in Sri Lanka. HeLLIS is the most active and well known network in Sri Lanka. It provides access to literature sources not available in the country; document delivery capability; and a training programme for end-users as well as the library staff members. The Medical Library at the University of Colombo is the national Focal Point.

Three key network activities

Providing easy access to health and biomedical information. The network provides health science researchers and policy makers with photocopies of references not available in the country. Interlibrary loan is a free service in Sri Lanka. Prior to the development of modern technology demand was high but delivery was slow. Today delivery is via electronic mail. Demand on the whole is for journal articles and retrospective information. An international current contents page service has been established. Medical journal subscriptions have declined due to price escalation; subject areas and titles ordered vary from year to year. Focal Point appreciated that there is a need to plan resource development, identify needs for specialisation, and create consensus on library resources to meet the demands and expectations of the research community.

Focal Point seeks to develop access to international databases through computerised facilities. Gateways developed by the World Health Organization (HINARI) since 2010 support research initiatives by improving access to scientific resources and providing current information to health professional, medical researchers and academics. As a result, research outputs in medicine and health sciences have increased.

Managing and sharing information resources. Focal Point has played a significant role in improving access to medical health literature. Since 1985, a range of materials has been available online through the Medical Library Website, as well as the Sri Lanka Health Repository website, have been created:

- Bibliography of Literature in the Health Sciences Research Collection (1985)
- Sri Lanka's Health Care Research (1982–1987)
- Bibliography of Medicine (1982–1988)
- Annotated Bibliography of Health Publications in Sri Lanka (1990–2000)
- Bibliography of Health Publications in Sri Lanka (2001–2005)
- Computerised database – Annotated Bibliography of Health Publications (1990–2000)
- Bibliography of Health Publication (2001–onwards)

Theses related to medicine and health sciences and journal holdings databases are online via the aforementioned websites. Since 1990, Sri Lankan medical literature has been sent to SEARO to upload to the Index Medicus of the South-East Asian Region (IMSEAR) database for world wide open access. Focal Point has also provided technical support to various initiatives:

- the AIDS Foundation to compile a database and publish it via their website
- the Department of Community Medicine in the University of Colombo to compile a Health System Research Database and make it available via the departmental website
- the Department of Obstetrics and Gynecology to compile a Reproductive Health Research database published via the National Coordinating Committee on Reproductive Health Research

Benefits to the rest of the world are access to hard to find health and biomedical information from the Asian region.

Improving libraries: resources, education and training. Libraries have been improved by collection development and the provision of education and training. HeLLIS Sri Lanka has made use of the WHO's in-country budget to

provide modern IT equipment. Education and training were recognised as essential to achieve resource-sharing. Most librarians need to develop their skills; training facilities enable them to upgrade their technical capabilities. Some staff were given the opportunity to visit more advanced health care libraries in the region.

Promoting professional and educational development of health science librarians in Sri Lanka is one of the key goals of the network. To provide better services and information resources to health care professionals and consumers librarians need to develop their role. To this end, the WHO and the Ministry of Health provide guidance and support to Sri Lankan Health Science Librarians. This fosters constructive discussions of mutual concerns and common problems amongst Sri Lanka health science librarians.

In view of the challenges facing libraries around the world, librarians must become knowledge brokers providing information skills training and advisory services to academics, as well as other professionals. Since 2001, various staff training programs and workshops have been offered, covering topics such as customer care; database creation; management and leadership; information literacy skills, search techniques; installation and customisation of DSpace open source software; technical knowledge for installing, configuring and customising open source software.

Selected librarians lead user awareness seminars for health professionals wanted to update their knowledge of information sources. These seminars are highly popular and held regularly in all provinces of Sri Lanka. The main question clinicians ask is how to retrieve new information rapidly, in an efficient manner. The seminars aim to instruct health information users in locating, accessing and evaluating available information resources in an efficient and effective manner. Participants acquire awareness of available information sources and scholarly publications.

Looking to the future

Research is needed to assess the effectiveness of the health library service and the Network. Sri Lanka health librarians need to be trained to conduct surveys and research projects so that they can develop a more responsive attitude towards their users.

Building a knowledge dissemination services for future generations. A survey was carried out to determine how health professionals use medical information; their use of computers and electronic information; and barriers to using information. The survey results were used to design a conceptual framework for a Virtual Knowledge Dissemination Service.

Acknowledgements

The author wishes to thank Ministry of Health, Sri Lanka; World Health Organization and Faculty of Medicine, University of Colombo, for their support to initiate this network, providing funds, and their insightful comments and suggestions, and also members and users of this network.

For details on how to contribute to this feature please contact:
Jeannette Murphy
Senior Research Fellow
CHIME, University College London
The Farr Institute of Health Informatics Research, London
222 Euston Road
London NW1 2DA, UK
Tel.: +44 020-3549 5305
E-mail: j.murphy@ucl.ac.uk