

International Perspectives and Initiatives

Abstract

This is the 15th in a series of articles exploring international trends in health science librarianship in the 21st century. It is the third of four articles pertaining to different regions in the African continent. The present issue focuses on countries in West Africa (Ghana, Nigeria and Senegal). The next feature column will investigate trends in North Africa.

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International trends in health science librarianship part 15: West Africa (Ghana, Nigeria, Senegal)

21st century health science librarianship in Ghana

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Introduction

The development of Health Sciences Librarianship in Ghana coincided with the establishment of the first Medical School in Ghana in 1964. The University of Ghana Medical School Library was

established 2 years later. After 1999, it became the College of Health Sciences Library of the University of Ghana.¹ As in many African countries, most health sciences libraries are government institutions, directly supported by state funding. These were set up to meet the teaching, learning curriculum, research and clinical practice needs of health sciences professionals.^{2,3} Later years saw the establishment of faculty libraries at Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, the University of Cape Coast, the University of Development Studies (UDS) and, quite recently, the University of Health and Allied Sciences (UHAS). In addition, to these faculty libraries, collections of health literature are available in health training and research institutions under the Ministry of Health and the Ghana Health Service. In recent years, a number of private universities have been created which offer health sciences as part of their curriculum and also have libraries and librarians.

Some of the early health sciences librarians who have made great strides in the local front as well as on the international scene include the late Charles Tetteh and Mr. Daniel B. Addo. They served in various leadership capacities in the Ghana Library Association (GLA), the Commonwealth Library Association (WALA) and the Association for Health and Libraries in Africa (AHILA). Others have continued in this tradition, including the first author, who was the vice-secretary-general of AHILA from 2010 to 2012, and the immediate past secretary-general from 2012 to 2014 and the third author, vice-president of GLA from 2013 to 2016.

Access to current medical literature

Before the advent of the Internet, Addo identified document identification and delivery as the two most pressing issues facing libraries in Ghana and in Africa.⁴ This resulted in a move away from institution based services by health sciences librarians to outreach services to users in deprived areas to maximise

existing limited resources.⁴⁻⁶ In Ghana, CD-ROM technology was used to create local publications based on MEDLINE citations and abstracts and distributed to all medical practitioners in the country. A decentralised cooperative effort was also embarked upon to identify and establish access to African research publications which resulted in the African Index Medicus. The planning, execution and funding of this project was supported by a partnership between the WHO, AHILA and the Health Foundation of New York.^{4,6}

Access to health literature received an unprecedented push under the Research4Life initiative (HINARI, AGORA, OARE and ARDI). This has been one of the most beneficial programs for the developing world as far as access to health information is concerned.

ICT's and health information access

The impact of information and communication technologies (ICTs) on health sciences libraries cannot be overstated since health information must be readily accessible, reliable, accurate and timely.^{7,8} In Ghana, technology has not only enabled innovation in teaching and timeliness in research but has also engendered discovery and the creation of new fields of inquiry.⁹ Formal and informal information literacy courses are designed and taught by health sciences librarians in Ghana as part of the undergraduate and postgraduate curriculum through workshops, seminars and clinical seminar sessions.

Internet connectivity and online databases have improved health information access and transformed the work of librarians. In 1993, a satellite communication system was established in the Medical School to facilitate communication among health professionals in developing countries with their counterparts in the developed world through Healthnet.¹⁰ Earlier initiatives such as the Pan African Development Information System (PADISNET) and the Regional Informatics Network for Africa (RINAF) impacted on access to information in Ghana and in Africa.

Continuing professional development

Although there is a library school at the University of Ghana which provides programmes in Library Science from first degree to doctoral level, there is

no health sciences librarianship specialism. Practicing health sciences librarians seeking continuous professional development must do so by acquiring a master's degree in library science and through mentorship, practice experience and professional networking.

Participation in international fellowship programs and engaging with the international community of librarians through conferences, workshops and scholarships has enabled young health sciences librarians to improve their professional practice. Various partners have influenced health science librarianship in Ghana such as the World Health Organization (WHO), the Association for Health Information and Libraries in Africa (AHILA), the Medical Library Association (MLA), and the National Institutes of Health (NIH), the International Federation of Library Associations and Institutions (IFLA) and, more recently, the Information Training and Outreach Centre for Africa (ITOCA). The national library association (Ghana Library Association) has played an important role in mentoring health sciences librarians.

Librarians' role in health sciences education

The library at the University of Ghana teaches several courses including a 2-credit-hour course to medical and dental students called medical computer literacy; a 3-credit-hour course in basic computer applications to students of Occupational Therapy, Dietetics Physiotherapy Radiotherapy and Medical Laboratory Technology. At the postgraduate level, the library teaches a 3-credit-hour course (computer applications) to audiology students. After graduating, a large proportion of these students take up clinical positions in the teaching hospital or other health service institutions and are involved in caring for patients.

Librarians also provide one-on-one sessions on search techniques and skills, as well as electronic information management in biomedicine, to postgraduate students and academic staff. In addition, the library supports departments in the teaching hospital by providing librarians for clinical seminar sessions where information retrieval skills on evidence-based medicine (EBM) are taught to practitioners. Emphasis is placed on e-resources in the health sciences (such as the

research for Life Databases). There are workshops where participants can apply what they have learned. These librarian led activities have had a positive impact on patient care, research, publication output and professional advancement.

Reflections on health sciences librarianship in Ghana in the twenty-first century

Health sciences librarianship in Ghana has come a long way since it evolved as part of the traditional library system in public universities the mid-1960s. At the same time, the profession faces challenges such as limited funding and the lack of opportunities for local training and specialisation. Yet despite these problems, health sciences librarianship in Ghana has made great strides. Many health sciences libraries in Ghana have a cohort of professionals who have obtained master's degrees in library science. Consortia, donor support, mentorship programmes, scholarships (through local and international associations) and fellowships have enabled librarians to contribute to health sciences education, research and innovation and clinical care. There is little doubt that their efforts have had a positive impact on the health care of the Ghanaian population.

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Trends in health sciences librarianship in Nigeria

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Introduction

With a population of about 170 million, Nigeria is the largest African country. It consists of 36 states and a Federal Capital Territory, Abuja.

The first medical library in Nigeria, Yaba Central Medical Library, was established in 1945 as a section of the Ministry of Health.¹ The number of Nigerian universities with medical schools increased from six in 1975¹ to 34 in 2015.² Most health science libraries in Nigeria are attached to medical schools, a few to medical research institutes and teaching hospitals. Four important trends have emerged in health sciences librarianship during the last decade which are described below.

First trend: increasing adoption of ICT for library operations

Technology tools that make handling of information easier, effective, efficient and economical are now being used in most health sciences libraries in Nigeria. Before the introduction of technology, information was available only in print but with technology, access to information resources is made possible to patrons anytime and anywhere, even in remote areas. Technologies adopted by health science libraries in the provision of health information include CD-ROMs,³ online catalogues, electronic mail and file transfer, digitisation, Internet and Web 2.0 (blogs, Twitter and Facebook). Medical libraries at the Universities of Ibadan and Lagos have moved from searching MEDLINE on CD-

ROM to online access. Also, some libraries are fully or partially automated using either Alice for Window, CD-ISIS, KOHA, E-lib GLAS, Tin-lib, SLAM, X-Lib or Virtual. These software packages were adopted by librarians to provide services such as instant access to books, identification of books borrowed by users and systematic stock taking of library holdings.⁴ The use of ICT has also enabled the creation of institutional repositories and the digitisation of some prized collections. The scholarly publications of staff are being digitised for inclusion in the institutional repositories whilst digital material is being harvested from the web and included in the repositories. These scholarly publications are accessible through the websites of some libraries or the institutional local area network. The adoption of technology in turn is leading to changing job titles in many libraries. Traditional titles included *Collection development librarian*, *Serial librarian*, *Reference librarian* and *Readers' Services librarian*. With the introduction of technology and emergence of digital libraries, Nigerian libraries now employ staff with job titles such as *Digitisation librarian*, *Web services librarian*, *Digital librarian*, *Emerging Technologies librarian* and *Systems librarian*.

Second trend: a shift in expenditure from print only resources to both print and electronic resources

Health libraries in Nigeria have now incorporated digital information resources to complement traditional print resources.⁵ Some libraries now spend money in acquiring web-based digital content rather than print resources. For example, libraries such as Kenneth Dike/ELOML, Ibadan, University of Lagos, Jos, Port Harcourt and Ahmadu Bello University, subscribe to electronic resources provided by Science Direct, Springer Online, Proquest, JSTOR, eGranary and EBSCOHost. Due to budgetary constraints, many health science libraries rely mainly on digital contents that are available free online. These include Research4Life (HINARI, AGORA, ARDI and OARE), Directory of Open Access Journals, Bioline International, PubMed Central, Biomed Central and other digital archives and repositories.

The resources in these archives include e-books, e-journals and e-databases.

Third trend: a move from traditional information searching to searching online electronic resources

With a reduction in the demand by library patrons for mediated literature searching Nigerian librarians now perform fewer traditional information searches. In the past, health librarians helped patrons search databases on CD-ROM (i.e. Silver Platter and OVID MEDLINE). Now, however, users find references using online databases. With access to electronic resources and the Internet, there has been a decrease in mediated searching. Many patrons now search Google for information.⁶ Librarians have observed that fewer faculty members visit medical libraries for information. Some seek help from librarians only when they are unable to find the needed information by themselves. Emphasis has shifted from mediated searching by librarians to training users on how to search for relevant literature from different online sources.

Fourth trend: a shift in user training from library orientation to information literacy

Health librarians in some libraries have introduced information literacy across the campus by going to departments to teach faculty how to access the online information resources of the library. For example, librarians in ELOML Ibadan, University of Lagos Medical Library, Federal Medical Center Library, Abeokua, Federal Neuro-psychiatric Hospital libraries, Yaba and Aro, Abeokuta, organise training workshops for students, resident doctors, faculty and other categories of staff on how to access, retrieve, use and manage digital content, in particular resources provided through HINARI.^{7,8} In some libraries such as ELOML, patrons receive training on how to organize and manage references using bibliographic management tools such as Endnote, Mendeley and Zotero as well as subscription-based online resources. Some librarians promote their work to the user community by marketing the library services to their patrons. This is done by reaching

out to them individually in their departments, faculty or teaching hospital. Marketing of library services is also done during training programmes through posters, handbills and by email.

Future projections – Nigerian health librarianship in the next decade

- In the near future, librarianship will evolve to become more specialised.
- Health sciences librarianship will become a specialty taught in Nigerian library schools. At present, there is no such specialty in Nigeria. Most medical librarians learnt on the job while a few were trained abroad.
- Health sciences librarians will be more involved in evidence based practice, working as part of a clinical team that go on ward rounds.
- Health sciences librarians will help clinicians to search the evidence and obtain answers to a clinical question in order to address a patient's health problem as is the practice in many developed countries.

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Major trends in Senegalese health libraries over the past two decades

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Introduction

Senegalese health libraries in the 1980s were totally different from those that emerged two decades later.¹ This report, based on a retrospective analysis of publications, is confined to the health library at the University Cheikh Anta Diop (UCAD). Looking at the way this library evolved, we can observe three main trends. Firstly, there has been a struggle to find ways of improving access to information; secondly, there has been a growth in local digital content as part of library networks, and finally, distance training on documentary techniques and the use of the Internet in medical research is now provided for information professionals and medical students.

Problem of access to information

Structural adjustment policies and financial cuts have had a profound effect on universities' budgets, particularly their libraries.² At the Central Library of the University Cheikh Anta Diop at Dakar (BUCAD), the average annual spending on books equates to 0.5 books per student, which is well below UNESCO's recommendation. Furthermore, there is a lack of adequate tools for properly managing collections or providing easy access to them.

All libraries in Senegal have created databases using free software bibliographic management packages. The library of the Faculty of Medicine and Dentistry at BUCAD manages their documents with an old version of Winisis software that does not allow online access to documents. However, the library does offer various services related to the Internet and digital documents.

The Health InterNetwork Access to Research Initiative (HINARI), a major international initiative offering free- or low-cost health information for developing countries, was launched in 2002 by the

WHO. Although there were high hopes for this initiative, it is not clear whether it is enough to bridge the gap between the information rich and the information poor.³ Despite various efforts, the academic community still faces problems accessing information owing to a lack of information resources, especially online materials.³

Development of local digital content as part of library networks

Faced with the challenge relating to access the library at UCAD has created various digital resources: the digital collection of academic work at UCAD (created and updated by the central library) houses a medicine/pharmacy section.³ In 2 years (2010 to 2012), the number of digitized medical theses increased to 3267. Between 2012 and 2014 a further 106 theses were digitised.² The digital collection of the Interstate School of Veterinary Sciences and Medicine UCAD of Dakar lists the theses or dissertations at this school. There is also the digital collection of the Institute of Dentistry.

These projects are based on partnerships and library networks. Most of these resources are created using open source software. Both Greenstone and DSpace are accessible from the National Portal of scientific and technical information that offers additional bibliographic data relating to university structures and national and international research.⁴

Distance training of information professionals and medical students on documentation research techniques and Internet use in medical research

The University of UCAD has a specialist information institute, EBAD (School of Librarians, Archivists and Documentary), which was set up in 1969. Since 1999 under a project called 'Continuing Education in Computerised Information in Networks' (FORCIIR), EBAD has developed new training methods based on distance education supported by communication technology. This project has trained professionals using the traditional method of face to face teaching but in addition has introduced distance training of professionals at local and international levels.¹

The FORCIIR project has put EBAD light years ahead of other Faculties of the University of Dakar, which were not able to benefit from what had been achieved. According to Mbaye Thiam, former Director of the school, EBAD 'has developed a partnership with all the faculties. In recent years, medical students come to EBAD to develop skills on documentation research techniques and the use of the Internet in medical research'.⁵

Conclusion

Libraries have made a transition from being manual operations to being hybrid organisations; in other words, they now offer manual, print and digital services. With the development of communication technology, we need to seek opportunities to find innovative solutions, which are appropriate, efficient and sustainable for libraries.

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