HYBRID LIBRARY: OPPORTUNITIES AND CHALLENGES FOR MEDICAL LIBRARIES IN NIGERIA

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Abstract

Development of electronic resources in the current age, has led to the incorporation of digital information resources to complement traditional print information resources in many libraries. The paper is a review of the hybrid library system as it relates to medical library services. Electronic information resources that are essentially important to the medical library in the digital age were presented. The paper discussed the opportunities offered by the hybrid library system which can help medical libraries in Nigeria to extend their reach and meet the health information needs of users. Limited funds for resource acquisition for both electronic and print resources were identified as the major challenge encountered by medical libraries in achieving this mission. The paper concludes that medical librarians should continue to refashion their services as funds and resources become available to remain relevant in the global paradigm shift in library and information science.

Keywords: Hybrid library, Electronic information resources, HINARI, Information and Communication technology (ICT).

Introduction

Ranganathan fifth law of library science states, “The library is a growing organism.” The introduction of information and communication technologies for information storage and access has led to an acceleration of this growth in the 21st century. Growth in library services for this century is seen in the incorporation of digital information resources to complement traditional print information resources. Electronic media have greatly changed the nature of libraries as well as users information needs and expectations. Medina and Coso (2005) notes that “libraries since their beginnings have had to adapt to the demand and expectations of their patrons. Nowadays, due to the changes that have taken place in the information field, libraries are obliged to take on modifications that affect all the tasks of the librarians.” This has resulted to a paradigm shift in information services. This new paradigm is hybrid library system.

The concept of hybrid library

Law (2003) stated that a hybrid library can be viewed as a combination of a physical library; performing traditional roles but those roles have extra consideration in the delivery of services in digital and print format. Therefore, a hybrid library is based within the physical but operates two services; the physical and the digital. Content is also presented in two-fold - a hybrid library provides both printed and electronic information simultaneously. Services in a hybrid library include traditional library services based on print resources and electronic services provided through Information and communication technologies (ICTs). Traditional library services in the
hybrid library include book and serial acquisition, loan services, reference services, cataloguing and classification services, interlibrary loan, and others. Many of these library functions and services are now provided through electronic means using information and communication technologies. The amalgamation of these services has turned libraries to hybrid libraries. According to Hampson (nd), it may seem a statement of the obvious that a library will provide access to many different types of media, but the essential element of hybridity is that the user is presented with simple and unified access.

It has been argued that the libraries have always run a hybrid system with different formats and types of information resources. However as noted by Medina and Coso (2005), the incorporation of digital materials is the distinguishing feature of hybrid libraries. These new materials have special characteristics such as being virtually part of a collection and in most cases needing different cataloguing and classification processes. The new digital media include CD-ROMs, DVDs, library digitized collection, and the Internet.

 Recognizing the growing importance of the digital media in the library of today, the present paper focuses on discussing the digital media that are relevant to the medical library.

**Digital resources and services in a hybrid library**

**The On-Line Public Access Catalogue (OPAC):** This is a library automation cataloguing system or computerized online catalogue of library resources including prints, audiovisuals, digital and software collections held in a library. It can be a standalone OPAC showing the holdings of a particular library or a networked OPAC showing the catalogue entries of various libraries in a network. OPAC is an essential feature of a hybrid library which has replaced the card catalogue system in most libraries in the developed world. Pearce, Cathro and Boston (2000) noted that for most libraries, the implementation of a web-accessible catalogue has been the catalyst for creating a local hybrid library. This has enabled the provision of a web interface that allows the user to access:

- The books and other physical information resources in the library’s collections;
- Digital copies of physical information resources in the library’s collections.
- CD-ROMs and online information resources which the library is licensed to access on behalf of its users, including full-text databases, union catalogues, indexing and abstracting services; encyclopedias and other reference tools.
- Information resources freely available on the Internet.

**The Internet** - The bedrock of electronic services in a hybrid library is the Internet. It is a boundless storage media for information resources in all ramifications and the vehicle for the evolving functions of the librarian as they apply the use of ICTs to expedite information access. Almost all functions of the libraries from collection development to resource sharing are performed using the Internet. Hampson (nd) noted “The hybrid library takes the Web as its delivery mechanism and, from this one access point, customers should be able to have direct access to the electronic information they are entitled to and be able to search for and locate relevant physical resources.” The Internet has revolutionized access to information. At the click of a button, one can have instant access to a verity of information resources and collections that is not limited by time and space. The Internet has also transformed the traditional reference services. Most reference resources especially bibliographic indexes and abstracts are hosted on-line with many publishers discontinuing their print production. Equally, the Internet has expanded current awareness services through the use of web 2.0 tools and email alerts. To function
effectively, and fully meet the needs and expectations of users, provision of Internet services for staff and users is a necessity for medical libraries in the current age.

**CD-ROM and DVD resources:** These are important electronic information storage media in a hybrid library. CD-ROMs can store large amount of data on a single disc; text (both bibliographic and full text), pictures and sound.

**Digitized collection**
As a result of the evolution of ICTs, many library resources are now digitized. Digitized resources are indispensable in a hybrid library and are assuming prominent importance in the collections of many libraries today. Digitized collections include digital surrogate of physical resources in a library holdings and born digital resources acquired by the library. Digitization of library collections provides opportunities for libraries to contribute and benefit from the worldwide network of information sharing and dissemination.

**Electronic books and journals**
A new feature in the collections of the library of the 21st century is growing importance of web-based books and journals. Hosted on the Internet and also available in CD-ROM are vast arrays of books and journals which libraries can subscribe on behalf of their users. Also freely available on the Internet are wide spectrum of free and open access journals. In a hybrid Library, these resources are indispensable tools for meeting the information needs of users.

**Online indexes, abstracts and full-text databases**
Traditional reference services relied on print indexes and abstracts with their limited search interface. Many indexes and abstracts are now produced digitally on CD-ROM and on the Internet with user-friendly and easy search interfaces. Importantly, most of these indexes and abstracts are hyperlinked to the full text of their citations either at the owners or publishers websites. This feature has reduced the limitation of lack of access to full text as was obtained with print indexes.

Some medical indexes, abstracts, and full-text databases are available on the Internet. These resources are potentially useful to users of the medical library. Medical librarians as part of electronic reference services should create awareness by highlighting their availability and usefulness. They should also exploit and customize access to these resources to develop their own local hybrid libraries. Some of these important online databases that have improved the collections of the modern medical library include:

**The Health InterNetwork Access to Research Initiative (HINARI)** ([www.hinari.com](http://www.hinari.com)). This is an initiative of World Health Organization produced in collaboration with major biomedical publishers in Europe and America. The main purpose of HINARI is to provide biomedical and health care research information to researchers and health professionals in low-income countries. This was intended to help bridge the divide in information access between developed and developing countries (Katikireddi, 2004). Through this unequalled resource, medical library users have access to full text research articles published in over 11,400 journals, 18,500 e-books, and other information resources covering the full spectrum of medicine, healthcare, and related social sciences. Figure 1 is an x-ray of major resources available in the HINARI database.
Figure 1: Resources in HINARI Database

In addition to a wide range collection of books and journals, HINARI provides access to over 70 valuable medical information databases and resources such as CINAHL, Pubmed, Systematic reviews such as Cochrane library, clinical evidence. It is important to note that most of these resources are subscription-based on the Open Net, out of reach for most libraries and researchers in developing countries. By providing access to these vital databases, HINARI can truly be called a multi-database.

Pubmed / Pubmed Central (http://pubmed.gov)  
Pubmed is a database produced and maintained by the United State National Library of Medicine and the National Institutes of Health. It is a free online medical database that provides access to abstracts in the fields of medicine, nursing, dentistry, veterinary medicine, the health care system, and preclinical sciences. Many PubMed records contain links to full text articles, some of which are freely available.

Cumulative Index of Nursing and Allied Health (CINAHL) - The Cinahl database is a comprehensive and authoritative source of information for nurses, and other allied health professionals. Seventeen allied health disciplines are covered in this index. They include dental hygiene, medical/laboratory technology, the medical assisting, occupational therapy, optometry, physical therapy and rehabilitation, radiologic technology, nutrition and dietetics, and others.

African Index Medicus (AIM) (indexmedicus.afro.who.int) is an index and abstract database of African health literature and research findings. This database is produced by the Association for Health Information and Libraries in Africa (AHILA) with the technical support of the World Health Organization. The purpose is to create access to African medical literate and disseminate research findings emanating from the region and on the region. To achieve this, AIM attempts to index all journals published in Africa. African Index Medicus is a valuable resource to provide access to locally published literature.

African Journals OnLine (AJOL) (www.ajol.info)  
AJOL is an online collection of African-published, peer-reviewed scholarly journals. AJOL provides access to over 400 peer-reviewed journals from 30 African
countries in all academic discipline, including medicine. It is also valuable in having access to local research information.

WORLD HEALTH PUBLICATIONS
http://www.who.int/publications/en

World Health Organization’s website provides a wealth of information on health-related matters for researchers. Available are world health reports, weekly epidemiological records, WHO statistical information service and more. WHO publications are very relevant in providing medical statistics information for users of the medical library.

Systematic Reviews
These are tools that evaluate and synthesize studies which report on the effectiveness of a treatment or prevention strategy. They are used to support evidence-based medicine which is defined as the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients (Sackett, Rosenberg, & Gray 1996).

Systematic reviews include:
- Cochrane Database of Systematic Reviews www.cochrane.org
- The Database of Abstracts of Review of Effectiveness (DARE)
- The American College of Physicians (ACP) Journal Club www.acponline.org
- Clinical Evidence (BMJ) www.clinicalevidence.bmj.com/

The databases and resources discussed above are indispensable in a hybrid library for meeting the information needs of modern users of the medical library. Their availability through the Internet has also made them easier to access. Proper use of the resources, require that users have the appropriate skills to retrieve information from these resources. It is the role of the librarian to create awareness and inculcate information literacy skills that will enable library users to harness these tools. This is usually achieved through information literacy education. User education has always been an integral part of library services. This role has expanded in the electronic age.

Information literacy
The proliferation of electronic information resources especially on the Internet has made information searching and retrieval difficult. This has created an urgent need for librarians to be highly involved in information literacy education. Information literacy training seeks to inculcate appropriate skills to enable information users identify, retrieve and use information resources effectively. It could be an informal activity carried out while librarians attend to users or an organized training programme based on a faculty developed curriculum. Aabo (2005) speculates that in the age of technology, libraries may need to more actively re-evaluate their mission to society, their methods of providing information. They may need to change their mix of service and focus more on training, education and guidance of ICTs use for everyone.

Opportunities and challenges for the Medical library in Nigeria in the new paradigm
The innovation brought by ICTs is a good opportunity for medical libraries in Nigeria to extend her reach and meet the health information needs of health professionals and students. It is important to note that availability of the Internet and many free resources on the World Wide Web has reduced the access gap between developed and developing countries. By taking advantage of the numerous online resources offered free or at reduced price to libraries in developing countries, medical libraries in Nigeria can run hybrid libraries which can serve to reduce the limitation imposed by scares resources. Such information resource like HINARI for instance has transformed access to medical information for libraries that are registered.
Another great benefit of the availability of electronic resources in a hybrid library is the opportunity for resource sharing among medical libraries. The hybrid library with the Internet as its information delivery vehicle can facilitate library consortia for joint purchase of digital information. This will offer economic cushioning especially for libraries with poor resources which may not be able to afford to pay for their journal and other resource needs. Medical libraries in Nigeria can pool their resources together to subscribe and develop their collections collectively.

The hybrid library offer librarians many opportunities to contribute to the education and lifelong learning of their users through user education. Computers, web based information literacy education, use of social media are tools available in the hybrid library to enrich user education and interactions. They also offer a good vehicle for current awareness services. By developing vibrant information literacy curriculum using these tools, medical librarians in Nigeria can contribute to the lifelong education of their clients and also improve the image of the library in their communities.

Despite these benefits, many libraries in Nigeria are faced with challenges that are affecting their ability to develop standard hybrid libraries that can play the expected roles of information delivery in the digital age. Limited funds for resource acquisition for both electronic and print resources are the major challenge medical libraries in Nigeria are facing in developing potent hybrid libraries. Electronic services in libraries require a measure of infrastructure to function effectively and to build up these infrastructures require significant funding. Purchase of both hardware and software are expensive beyond the normal budget of most libraries. Lack of funds translates to inadequate resources and basic infrastructure. Most challenging of this infrastructure is Internet bandwidth. Setting up and maintaining Internet bandwidth in the country is generally expensive. Most libraries cannot afford to pay for a standard Internet bandwidth. This service when available like electricity supply is epileptic and unreliable. Print resources are also not exempted as many medical libraries find it difficult to renew their collections due to lack of funds.

In the absence of requisite funds, most libraries virtually depend on free electronic resources provided by external agencies. These free resources may not be customized to the needs of users of the medical library. It has been observed that there is limited access to most high impact subject journals in HINARI database which is the major database used by majority of medical libraries in Nigeria. In addition, there is very limited coverage of local journals in this database. Villafuerte-Gálvez, Curioso and Gayoso (2007) completed a review of the journals available on HINARI to evaluate whether the “highest impact” articles on the Science Citation Index were available through this database. Their findings revealed that the top five journals from any of the major publishers were not available on the database. “The collections of journals from the above-mentioned publishers together represent approximately 57% of journals that were supposed to be accessible through HINARI, while the remaining 43% accessible were largely composed of open-access journals or journals that make online access free to low-income countries.” In the absence of funds to subscribe to these important journals not available in HINARI, information is lopsided to what can be accessed through the free resources without access to the high rated journals.

Despite these challenges, medical librarians in Nigeria like their counterparts all over the world should understands that the roles of libraries in the 21st century is closely and firmly intertwined with the development of electronic services to complement traditional print resources. They should continue to refashion library services as funds and resources become available to remain part of the global paradigm shift in library and information science.
Conclusion
The capacity of the medical library to serve her users effectively in the age of technology is unlimited. Technology has brought its own opportunities and challenges. It is important to note that the hybrid library is not a survival mechanism in the face of proliferation of electronic resources and information overload, but a necessity in the information age. Carr (2006) states, while some, at least, saw the development of global electronic access to information as a threat to the very future of the physical library, others rightly saw it as an opportunity to rethink, and to refashion, their library’s services according to what their users needed in what had become, for the first time, a fast-changing information environment.”

References:


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