

## Roles, Responsibilities, Problems and Prospects of Medical Libraries toward Health Information Provision in Nigeria

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**Abstract** A United Nation's Administrative Committee has found that technology inequities and knowledge gap caused by misdistribution of information resources and poor access to information and its related opportunities in less developed nations has created a wide gap between the less developed and the other countries of the world. The gap so created has led to information poverty in many countries and Nigeria in particular which is besieged with the problem of poor access to health information. This paper is focused on establishing the expected roles and responsibilities as well as the problems and prospects of medical libraries in the Nigerian state vis a vis their capabilities in information services which could upscale the health literacy level of an ordinary rural Nigerian. The paper adopted a simple methodology of literature review to provide answers to the topic. The aim was to provide some leverage to accessing health information via good use of medical library services and resources in a country highly devastated by hunger, pandemic diseases and social ailments. It discovered that the state of health literacy in the country was poor even when medical libraries need to influence knowledge translation, foster communication and interpretation of health information, provide platforms for standards, encourage support for free access to information amongst others. A number of problems affecting performance of these roles like lack of support specialists, poor inventive thinking and cost of resources, inactive policies and language barrier were discussed. Areas of future potentials were given as the paper concluded that weaknesses noticed could be turned around into areas of strength for the medical libraries.

**Keywords** *Health Information Gap; Information Poverty; Information Service; Library-Medical*

### 1. Introduction

A statement on Universal Access to Basic Communication and Information Services (UABCI) was issued by the United Nation's Administrative Committee on Coordination in April, 1997. The statement identified the deepening misdistribution of access, resources and opportunities in the information and communication field. The knowledge gap with respect to information and technology inequities between industrialized and developing countries were found widening by every inch and are creating a new type of poverty, the information poverty. This new form of poverty has become home grown in

Nigeria without check, especially in health information related issues where the library could play a vital role.

Health information literacy according to Olaide (2013) connotes the ability to comprehend information on health related issues and apply the knowledge in making decisions about one's health care needs. Going by this assertion, a seemingly literate person could still become illiterate, when confronted with health information which may overwhelm him. Even in advanced climes such as United States according to the study, about 40 per cent of the population has limited health literacy. The resultant effect of the prevailing limited health information literacy in the Nigerian society has put an ordinary Nigerian at a less privileged health status leading to more frequent hospital visits, increased health care cost, reduced net productivity and enhanced both the morbidity and mortality rate.

But libraries, as Egunjobi and Akerele (2014) submitted, are primarily establishments in our communities meant to meet the information needs of citizens at all levels. Obviously, one of such needs is health information which could be primarily be dispensed by medical libraries. However this social obligation seem to be far-fetched in the Nigerian communities and has caused information poverty to be so rampant in the country consequent upon which people's awareness about their health is incredibly low. Thus the prevalence of libraries in developing countries like Nigeria has not made expected impact to reduce this new brand of poverty probably because of lack of affordable access to core information resources; legislative policy that could promote equal participation in the information society; trained work force to provide value-added products and services; and the capacity to manage and service the information technologies therein.

Should these capacities be built into information services provided in such libraries, they would have become the corner stone in our country's national development endeavours to this end. Therefore, this discuss is an effort to repackage expectations and deliverable services of medical libraries particularly in Nigeria and prompt such expectations for the rural populace to exploit as well as establishing an alert module for practicing medical librarians. It is a review that aims to draw attention to the importance of health information literacy (which could be provided by medical libraries in the country) and assumed to be a major tool to improving patients' health outcomes. It is an attempt to enhance the opportunities for health literacy for the ordinary citizens which could lead to contributing positively to national development. The discussion is presented as an opinion paper on roles, responsibilities, problems and prospects of medical libraries as outlets for health information literacy since they also dispense such for users' interests.

## **2. Study Objectives and Methodology**

The objectives of this study are (i) to redefine and present the roles and responsibilities of medical libraries in Nigeria to attract the attention of the stakeholders, (ii) to examine problems hindering the performance of medical libraries in the country along this line and (iii) look at the prospects of these special libraries in achieving their expected social obligations in the Nigerian society. The methodological approach includes review and analysis of literature to arrive at suggestions and conclusions. The major research tool used is literary documents.

## **3. Library in the Contemporary Time**

The online encyclopaedia (the Wikipedia) described the library in two distinctive parts. First, it was defined traditionally as a collection of books and in the contemporary time, it is defined as a collection of sources, resources and services organized to support teaching and research by the public, an organization, private individual or an establishment (<http://en.wikipedia.org/wiki/library>). The differential factor about library as defined in the contemporary time is in the collection of sources, resources and services. Resources here are the total means available for increasing production or

profit. This same meaning applies to library resources in terms of academic and research productivity. Therefore, library resources are assumed to aid teaching and learning including research in every nation of the world. The use of such resources in the dissemination of health information to rural populace in Nigeria is also expected to impact on health care awareness for the people of the country and as tools for the health care providers. Medical libraries are specialized libraries established in health institutions for the provision of information in aid of research, patients and scholars. The medical libraries are thus expected to play very important part in health information dissemination.

#### **4. Review of the State of Health Information Literacy in Nigeria**

In the works of Nutbeam (1998), the World Health Organization's definition of health literacy was given as a representation of the cognitive and social skills which determine the motivation and ability of individuals to gain access to understand and use information in ways which promote and maintain good health. Evidence of low health information literacy was reported earlier by the Institute of Medicine (2004) where it was noted that about ninety million people in the United States, had difficulty understanding and using health information. This health information illiteracy ranges from not understanding directives on the use of medicines; not understanding the need for consent forms or as have resulted in the prevalent use and abuse of drugs and drug-related substances.

Health education according to Glanz, Rimer and Levis (2008) has become a vital tool which plays a significant role in closing some of these knowledge gaps created due to disparities in social opportunities and is seen as most effective method of preventing disease other than any other intervention. It shapes the health behaviour of an individual which understandably has links to health outcomes (De Walt et al., 2004). So, because patients need access to impartial and high quality health information to make health decisions, providing health information as for Onotai (2008) is now at the core of health services provision.

Be this as it may, health information literacy levels in many societies of both the developing and the developed world have been described as low and seen as a contributing factor to poor health conditions. This condition is even truer of the Nigerian community where adult literacy rate is put at 66.8 percent (Nutbeam, 2008). Inadequate health literacy is therefore believed to be a factor responsible for a considerable proportion of individuals in rural communities in Nigeria failing to follow medical directives for health maintenance.

Accessible researched literature in Library and Information Science in the country has shown that indebt research on issues bordering on health information literacy is still scanty. Atulomah and Atulomah (2012) and Egunjobi and Akerele (2014) have done studies on health information literacy; perceived-information needs and preventive-health practices in Nigeria and found that levels of health literacy is unacceptably low. In another study of health information literacy in Nigeria, Olaide (2013) has reported that the fall-out of the health information literacy is evident in the citizens' inability to locate health care providers and services as well as being unable to divulge information on health history. These studies all point to the fact that health information deficit in today's Nigeria could be an important causative factor in the observed low preventive-health actions prevalent in virtually all communities in the country.

#### **5. The Gaps in Health Information Literacy and their Effect on the Nigerian Society**

Arunachalam (2003) identified four major gaps for the least developing countries of the world which hinder their participation in the sharing of information and in the communication revolution. These include the following;

- Lack of affordable access to core information resources and telecommunication systems and infrastructure.
- Lack of the capacity to build, operate and manage the technologies involved.
- Lack of policies that could promote equitable public participation in the information society
- Lack of a trained workforce to develop, maintain and provide value-added products and services required.

To support the findings of Arunachalam (2003), the World Health Organization African Region report on Nigeria (2013), ([http://www.who.int/countries/nga/areas/health\\_information/en/index.html](http://www.who.int/countries/nga/areas/health_information/en/index.html)) agreed that the participation of Private Health Facilities in the National Health Management Information System (NHMS) since its establishment in 1995 has been very low with untimely returns of poor quality data. The report showed that utilization of data is low and with little or no feedback information. This has shown and continued to show negative impact on healthcare services and health information in Nigeria.

This report which was put together two years to the target year of the Millennium Development Goals, 2015, indicated that there was yet to be a framework for the coordination of health research and related activities in Nigeria. Also in their own study, Watts and Ibegbulam (2005) had reported lack of ICT infrastructure and online access of information in Nigeria Colleges of Medicine. These evidences are enough gaps and reasons to have categorized Nigeria as under developed nation with respect to health information services and healthcare management. Therefore efforts geared towards correcting these gaps through provision and access of right information could promote the development of the country and impact health information literacy on rural Nigerians. To understand how medical libraries could impact on these needed health information literacy, we would look at their roles and responsibilities.

## **6. Roles and Responsibilities of Medical Libraries in the Provision of Health Information**

Medical libraries are as important as the health information which they provide and there is obviously a growing demand for health care information by all. Thus, if the Librarian's primary role is to facilitate the ideals in the Library Bill of Rights, as specified by Hurych and Glenn (1987), this paper suggests the following roles and responsibilities for the medical libraries with a bias to the Nigerian state.

### **6.1. Influencing Knowledge Translation**

Presently, the relationship between medical libraries, librarians and their clients has dramatically changed due to the rapid spread use of internet and digital communication advancements and information and communication technological developments across the world. Considering these, Muhamed (2011) had noted that the roles of medical libraries must change for them to be able to meet the new opportunities and challenges for accessing and utilizing health knowledge in this digital age. Consequently, the new role and or responsibility of medical libraries according to him may include; collaborating with universities and research centers to support knowledge translation and to provide evidence for policy and action through systematic and in-depth research as well as supporting staff training to build capacity in searching for and managing information resources.

### **6.2. Promoting the Generation and Storage of Knowledge in Terms of Information Resource Outlets**

Just as new inventions in information technology have become the driving force affecting all aspects of librarianship – search, access, storage, retrieval and dissemination of information in medical libraries cannot be left out. As Sollenberger and Holloway (2013), rightly captured the trend; changes in medical information and technology are already revolutionizing health care delivery in all parts of

the globe. So the medical libraries as at today have to focus on how to develop and sustain reliable health information systems. Because access to information through any outlet is vital to health care delivery, medical libraries need to re-strategize on patterns of information synthesis sustainability and management (Rothstein, 1993).

### **6.3. Fostering of Communication and Interpretation of Health Information Packages for the Good of the Rural People**

Medical libraries in Nigeria could also be converted into a knowledge center to manage the different types of knowledge found within some professional databases, institutional databases, and regional documentation databases. In so doing, it would give support to learning and research at the national, regional and international level thereby boosting access to information by the rural users from some initiatives like the Health Inter-Network Access to Research Initiative (HINARI), Reproductive Health Library (RHL), Global Health Library (GHL) and Health Evidence Network (HEN) et cetera. Medical libraries could as well manage networks of knowledge resources and centers and act as a hub to support access to health information since communication and sharing knowledge are integral part of their activities.

### **6.4. Providing a Platform for Standards in Health Information Dissemination for the Users and Producers of Information**

Medical libraries being special in nature could be helpful in the establishment of standards and setting of norms for the provision of health information in the country which could be part of the national information policy. Since these libraries are concerned with information that have direct impact on life, they should be seen championing and contributing to the letters of health ethical issues, best practices and guidelines including the presentations in health information packages.

### **6.5. Supporting Research in Priority Areas in Health Sciences**

The library is regarded as a centre for exchange of knowledge and a hub for academic activities because all educational processes revolve round it and their output are thereunto, preserved. Medical libraries in Nigeria should be seen to provide support anchored from this angle which would enhance developing a functional database that could serve for the National Health Management Information System and as well take cognizance of the health issues of the Millennium Development Goals (MDGs) as in reduction of child mortality, improvement of maternal health and fight against HIV/AIDS, malaria, and other diseases. In addition to this, medical libraries could support research by providing documentations in priority areas of health research in form of abstracts, compendia and translation booklets to aid reduction of risk factors and burden of diseases, improve health systems and promote health generally as a factor for development.

### **6.6. Encouraging Public Trust and Support for Free Access to Health Information through Collaboration**

One of the principal services of a medical library is information dissemination to the needy. This sort of service could be arranged for interest bodies by a group of collaborating libraries through resource sharing in order to ensure availability of information for the profile needs of these interest groups. Since provision of funds is always the key problem to accessing information and achieving set objectives (e.g. best practices, quality assurance) amongst and between various bodies in the country, resource sharing plan supported by these special libraries could be encouraged so that such projected objectives of different stakeholders from different sectors of the economy could be achieved. Weldon (2005) had earlier noted that collaborations ensure medical libraries vitality.

### **6.7. Entrenchment of Functional Literacy**

The medical library as a social instrument and a link to communication systems has the capacity to inculcate into the patrons, a functional literacy which will eventually lead to a live long ability in productiveness, self-reliance, quality assurance, competency and competitiveness in any given field and society. This could aid access to new trends on educational matters and would reshape the contribution of the patron to the society. This is even more desired in the African continent which has problem of internally displaced persons with varying literacy level.

## **7. Problems Affecting Medical Libraries in Nigeria**

In Nigeria, certain issues affect the extent in which medical libraries could achieve their potentials as listed above. Some of these issues are so contagious that if not taken care of by instituted authorities, these special libraries may just be there as monumental structures. Thus, this part of the work, presents some of the factors that hinder the performance of medical libraries in the country.

### **7.1. Inadequate Literacy for the Digital Age**

Despite some arguments, it could be accepted that problems exist of digital age literacy amongst librarians in tertiary institutions in Nigeria. There is lack of functional literacy ability to decipher meaning and express ideas in a range of media requiring the use of images, graphics, video, charts and graphs or visual images. Also, the technological literacy competence in the use of information and communication technologies of today, are somewhat lacking. This affects knowledge impact and health information dissemination and management. Most of the librarians in our medical libraries today were not trained with ICT facilities and as such, find it difficult to work with the technology.

### **7.2. Problem of Inventive Thinking**

Since librarians of medical institutions in the country lack digital literacy, there seem to be also the lack of creative problem-solving and logical thinking that would result in sound and sound – reasoning judgments. In view of the foregoing, the ability to use imagination to create new things is highly limited. The desire to know, take risk or adapt and manage in a complex and interdependent world is often compromised. The resultant effect is the poor zeal to receive hands-on training on the ICT resources, the fear to make a change and adapt to the existing demand.

### **7.3. Cost of Health Information Resources**

An aspect of the challenges facing medical libraries in the country is the cost of health information resources. Health information resources are media for teaching and learning programmes that require a large capital investment and this has been the problem of developing countries like Nigeria. As Oketunji et al. (2002) and Ani et al. (2005) have reported, the level of funding of university (tertiary institutions') libraries is relatively low and about 85% of the them do not have regular budgets that supports their medical libraries. This situation is worsened by the fact that most of the medical libraries have not initiated or are not allowed to initiate viable income generating strategies to supplement their meager funding.

### **7.4. Instability of Electrical Power Source**

The use of ICT gadgets in medical library services for education (teaching, research and learning) in Nigerian tertiary institutions may not be achieved with the happenings in the supply of electrical power in the country. It is known that most of the ICT facilities use electrical power for operation and in Nigeria there is always a destructive interruption of power supply. The bad state of power supply in



the country is a great challenge to the use of ICTs for either library services or in any other sector including the economy. Automation of library operations in the country has been severely hindered by this factor as Idowu and Mabawonku (1999) had observed.

#### **7.5. Lack of Technical Support Specialists**

Some facilities and equipment especially, the ICT tools no matter how good they are at acquisition are bound to break down or fail in one time or the other. This has been happening in medical and other type of libraries and immediate remedy is always difficult to come by because of lack of technical support specialists. Technical support specialists are essential to the continued viability of ICT use in library services and in particular in medical libraries. The requirement for this depends ultimately on what and how technology is deployed and used. The general competencies needed according to Ugwuona, Oguike and Chukwu (2010) would be in installation, operation and maintenance of equipment, network administration and security but most often; they are not available in the third world countries. The work of Blurton (2007) reported an incidence of this nature from the Philippines, where disabled computers took months to be repaired because there was no technician in the vicinity and the computers have to be taken to the nearest city, hundreds of kilometers away from the users' location. One could only imagine the fate of library patrons in this circumstance.

#### **7.6. Inadequate Basic Supporting Facilities**

From the physical structures available in Nigeria, it could be taken that the country is deficient in the provision of a technological base that would support the use of information and communications technology resources for medical library services in her tertiary institutions. Some of these support facilities are the Local Area Network (LAN), the Wide Area Network (WAN), telephone and other utilities. Nigerian telecommunication networks have been found to be inefficient and less reliable than networks in other regions of the world as a result of several factor including power supply, telecommunication gadgets and the overall value system. In most of the institutions, these support facilities are either in bad condition or entirely lacking. With this condition, information dissemination using ICT resources in medical libraries would seem unachievable.

#### **7.7. Problem of Lack of Acquisition Policy**

Majority of the special libraries in Nigeria where Medical libraries are categorized do not have a working acquisition policy for their operations (Ugwuona and Dike, 2003). This could be a fundamental error at the point of their establishment since they are often carved out to serve the interest of a parent organization. This often leads to subjecting the medical library to the procurement plan of the parent organization at most cases.

#### **7.8. Administrative Problems**

This factor could also stand for managerial challenges or institutional weakness in the context of this work. Some developing countries in Africa have leaders and administrators with corrupt intents who weaken every effort made towards achieving good goals by looting and embezzling monies meant for developmental projects. Medical libraries in Nigeria have witnessed this problem and such intents have led to a retrospective growth and expansion of medical libraries in terms of collection building. In addition to this problem is the weak institutional framework to check the trend hence administrative problem is one of the principal challenges facing medical libraries in the dissemination of health information in Nigeria.

### 7.9. Uninsured Sustainability

Nigerian development history has shown that many projects and government/institutional programmes begin with a great hope but soon after fade out with a whimper. This history is also obtained in the Nigerian medical libraries. In several occasions, most of the ICT-based projects and resources available in the medical libraries are donor-based which are delivered with no plan to maintain or sustain. The donors may be national or international aid agencies or corporations and after their exit, not enough attention is paid for sustaining such gestures. This of course, is another challenge towards dispensing health information in the country.

### 7.10. Language Barrier

Medical information is often complex and are written at a level beyond what rural community members could understand. In a large community with diverse population with a mixed literacy level of information users, medical librarians are faced with problems of interpretation of the contents of information sources in a different language. In this case, language barrier becomes an obstacle and a challenge for information dissemination business since there will a hitch in access to desired information.

## 8. Prospects for Medical Libraries in Achieving These Expected Social Obligations

That Nigerians and indeed other nationalities need health information is a statement made in good faith. The more they are informed about specific health conditions, the healthier they become and able to find solutions to other economic and social needs. This part of the work is concerned with the potential services that the medical libraries could indulge in as to be able to dispense health information to the expectation of the citizens and impact positively to the growth of the nation.

- Medical libraries could establish an innovative feature that can encourage tele-medical information services which allows diagnosis through video workstation, as well as problem-based learning classrooms in which digital technology allows the public to view virtual realities and computer stimulated medical and health situations. Apart from this, use of telephone, electronic mails or webpages and creation of health links on the library's website could be useful for online services to the people.
- Medical libraries could also establish drug information database centres for their patron organizations which could be operated and maintained by the library to dispense health information.
- Medical libraries should be involved in the development of plain language booklets (for the people) to enable explanations of the science behind chronic illnesses like diabetes, hypertension, malaria, tuberculosis, sickle cell disease and asthma et cetera.
- Medical libraries in Nigeria could also run a hybrid library system which can serve to reduce limitations imposed by scarce resources and technological know-how. With information resources from HINARI, Reproductive Health Library, Health Evidence Network and similar others, access to medical information could be made easy on both electronic and hard copies for users. This would encourage many within the Nigerian communities.
- Medical libraries could also come together to form a consortium with allied partners in such areas like acquisition, resource sharing and networking so as to help in meeting the health information needs of consumers, majorly the rural people.



- Medical libraries could plan and operate some community services in partnership with health related non-governmental organizations through sponsorships, trainings, inter-library staff exchange programmes, resource loans and referral initiatives, just to provide services to consumers.
- Educational programmes on health care topics like blood pressure screening, health insurance counseling and other health talks could be initiated to take place in the libraries with invitation of experts in these areas to speak to interested clients and the patron community members.
- Support for publication of articles on local newspapers/bulletins written by library staff explaining which medical libraries offer health care information should be encouraged and sustained by medical libraries.

## 9. Conclusion

This paper has presented salient issues on health literacy with a critical look at the gaps in health information management in Nigeria as well as the potentials of medical libraries that could turn around their weaknesses into strength. Of all the types of libraries, medical libraries (also called Special or Research libraries) stand out as most relevant information centres that could reform citizens with social ailments. The Millennium Development Goal in respect of attaining good health in the country should be pursued vigorously so that if achieved, could be sustained even beyond the target year, 2015. Effort exerted during the Ebola period in Nigeria (April to August 2014) should be revisited in the area of access to health information for all.

This article gives a way forward but the constraint is that these types of libraries are not easy to come by in major part of rural areas of Nigeria. Sequel to this lapse, the work could only propose and encourage groups and government to support the establishment and extension of such libraries in all the three tiers of health facilities in the country. The citizens must also be encouraged to access the services of medical libraries as have been explained and become literate on their health matters. Medical librarians on their part should endeavour to aid citizens' access to health information in whatever form and means since 'health is wealth'.

The work is recommended for those in authority, librarians, library clients of all categories and the academic community in general.

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