# Development of a training manual on information literacy for health science students in Africa

**A proposal submitted to the National Library of Medicine (NLM), Bethesda, Maryland, U.S.A**

By

Agnes Chikonzo, MLIS

University of Zimbabwe Library

achikonzo@uzlib.uz.ac.zw

Cristina Horta

Abdulrahman Anne

Christine Kinyengo

Nancy Kamau

Sara Mbaga

Grace A. Ajuwon, MLS

E. Latunde Odeku Medical Library,

University of Ibadan, Nigeria

agajuwon@yahoo.com

**October, 2009**

**Introduction**

The past three decades have witnessed an explosion in the volume of published medical and health information [1]. Advances in telecommunication technology in the last two decades have led to the development of computer networks that allow access to vast amount of information and services [2]). The amount of electronic health information available to users now is greater than ever and keeps growing on a daily basis. The Internet, a global system of connection between millions of computers that allows almost instant access to and dissemination of information has greatly and dramatically changed the means by which information is generated, processed and retrieved. With the advent of the Internet, bibliographies, databases, reference and consumer health information resources, Evidence-Based Medicine (EBM) resources and journals with full text articles have become more accessible, allowing the academic scientific community, medical professionals, students and consumers to be up to date in a previously unthinkable manner regarding the speed and efficiency of accessing and obtaining information [3]. The Internet has now become a key source of health information to students, teachers, other professionals and the general public. The availability of this new and potentially vast source of information also improves strategies for medical decision-making [4] as well as teaching and learning.

As web-based technologies become more readily available in the digital era, so too does the need for students to acquire and fine-tune their 21st-century skills, including their information finding abilities. A national survey conducted by the Pew Internet & American Life project found that 63% of those who used the Internet were successful in finding the information they needed, but only 57% of users seeking information specifically about health-related matters were successful [5]. The results of a case study of teaching information literacy skills showed clearly that fewer than half of graduate-level health science students were able to demonstrate competence on the first web-based, technology-dependent assignment [6]. The Internet has changed contemporary workplace skills, resulting in a need for proficiency with specific digital, online and web-based technologies within the fields of medicine, dentistry and public health [6]. Since no standardized methods yet exist for both teaching and learning of EBM skills, it is imperative that health sciences should incorporate substantial components of ICT, e-learning and specific

guidance for acquiring the skills for filtering and establishing the quality of current information from online information sources such as databases.

Through interactions with the students during the last five years, African medical librarians have observed that many health science students on the continent depend on unreliable sources for health/clinical information. More worrisome is the fact that many of these students typically rely on Wikipedia and Google to satisfy their information needs. Since these students are going to graduate and be responsible for caring for others health needs, it is important that they know how to navigate the maze of information that are available electronically. More importantly, they need to be formally taught about the available sources of information that are credible, reliable, accurate, and current as well as how to access them. The curriculum of most schools of health sciences in Africa do not have information literacy course. This proposal was therefore developed to address this need. The decision to develop a training manual was the outcome of a meeting held in Nairobi, Kenya in July 2009 when librarians, Deans and Provosts of Schools of Health Sciences in Africa agreed that there was need for an information literacy course for health sciences students in Africa.

**Methodology**

**Goals and Objective of the project**

The goal of this project is to improve the knowledge about health information resources and skills for accessing these resources among health sciences students in African countries.

Specific Objectives are to:

1. Enhance medical student's understanding of electronic resources
2. Equip students with the necessary skills to fully access, retrieve , health/medical information from online sources (databases, online books and other resources)
3. Inculcate in students how to utilize biomedical information resources accessible online in obtaining information for solving problems and making decisions that are relevant to their studies and to care of patients when they qualify
4. Inform and equip students with skills to access the local content which is available in the participating Libraries' Institutional Repositories

**Justification for the manual**

1. The training manual will help ensure consistency in presentation of Information Literacy contents and will also ensure that all training on skills, processes, and other information necessary to perform tasks are together in one document.

2. The participating University Libraries are investing so much money in the acquisition of electronic resources and would want to ensure that these resources are fully utilized so that they get value for money.

3. Some of the participating University Libraries have embarked on building local databases to enhance access to local information and grey literature. The Libraries now have established Institutional Repositories and they want to ensure that students and staff have skills to access electronic information in the Institutional Repository

4. E-resources training is critical for African health sciences students so that they become proficient in accessing these resources.

5. Interaction with some health sciences students has shown that some are not accessing electronic resources either because they are not aware of them or they are not sure of how to go about searching and getting relevant information f from such resources as online databases. Among some of the reasons that they gave as hindrance to their accessing electronic resources is lack of training, which is what the proposed activity seeks to address.

**Anticipated Benefits of the manual**

The proposed activity will benefit both students and the library. For the students it will equip them with knowledge and skills needed to access and fully utilize electronic resources at their disposal. This will provide them with alternative sources of information that are current and credible.

The participating libraries will benefit from having informed clientele, who will make use of the resources that it has, thus getting value for money. The training manual will also serve as a marketing strategy for the library, as the librarians will demonstrate to faculty and students that they are information specialists and impart the skills to students on how to access electronic resources.

**Target Group and Participating Countries**

The target audience for the training is first year students in the schools of health sciences in participating countries.

A medical librarian from seven African countries would participate in this project. The participating countries are:

- Kenya,

- Mali,

- Nigeria

- Mozambique,

- Uganda,

- Zambia

- Zimbabwe

**Components of the Training Manual**

The manual will have six components / modules as listed below:

- Information sources

- Searching tools

- Searching techniques

- Intellectual property rights

- Evaluating and managing information resources

- Communication skills

The manual will be written in English and later translated into French and Portuguese languages. A template will be developed and used in writing the contents of each module to ensure uniformity. Each participating librarian will be assigned to develop the content of a module. After the initial draft module has been developed, the contents will be peer reviewed by members of the team. Thereafter, a four-day meeting will be convened where final editing and further review of the manual will be carried out. The plan is to hold the meeting in Maputo, Mozambique. Maputo is considered an appropriate venue for the meeting because a member of the team has volunteered to host the group at no cost.

**References**
1. Kastin S and Wexler J (1998). Bioinformatics: Searching the Net. Semin Nucl Med, 28(2):177-87
2. Glowniak, JV (1995).Medical resources on the Internet. Ann Intrn Med, 123(3):123-131
3. Cuenca AMB and Tnaka ACA (2005). The influence of the Internet on the academic scientific public health community. Rev Saude Publica, 39(5)
4. Anderson (2007). The role of the Internet in medical decision making. Int J med Inform, 47(1-2), 43-9
5. Washington, DC: Pew Internet & American Life Project; 2008
6. Kingsley K and Kingley K (2009). A case study of information literacy skills. BMC Medical Education, 9:7; doi: 10.1186/1472-6920-9-7

## Timeline of Activities

| Activities | Month for Implementation |
|---|---|
| Design of manual template | November, 2009 |
| Assignment of modules to participating librarians | Nov/December, 2009 |
| Development of module contents by participating librarians | December, 2009- February, 2010 |
| Peer review of developed module contents | February, 2010 |
| Meeting at Maputo for final editing review of the manual | March 16-19, 2010 |
| Report writing | April, 2010 |
| Submission of report and manual to NLM | May, 2010 |

# Proposed Budget

| Item | Amount = USD |
|------|--------------|
| Airfare<br><br>   Bamako (Mali) to Maputo<br><br>   Lagos (Nigeria) :    :<br><br>   Nairobi (Kenya) :    :<br><br>   Lusaka (Zambia) :    :<br><br>   Harare (Zimbabwe):  :<br><br>   Kampala (Uganda) :   :<br><br>   Total | <br><br>1,841.16<br><br><br>1,262<br><br>1011<br><br>762.28<br><br><br>690<br><br>850<br><br><br>**6,416.44** |
| Accommodation | 350 |
| Stationery<br><br>Toner cartridge (for printing a sample of the training manual), Note pad, Pens and production of 8 copies of completed manual | 650 |
| Feeding  for 7 librarians for 4 days | 350 |
| Honorarium for 7 librarians @ $350 each | 2100 |
| Miscellaneous | 120 |
| **Sum Total** | **9,986.44** |

2009-10

# Development of a training manual on information literacy for health science students in Africa

Chikonzo, Agnes