AWARENESS AND USE OF ELECTRONIC INFORMATION RESOURCES BY ACADEMIC STAFF OF TWO MEDICAL COLLEGES IN NIGERIAN UNIVERSITY

AHIAOMA IBEGWAM, *PhD*
University Librarian,
Michael Okpara University of Agriculture, Umudike,
Umuahia, Abia State.
anibegwam@yahoo.com

OGUNYADE, T. O.
Reference Librarian,
Medical Library, College of Medicine.
University of Lagos. Lagos
ogunyadetaiwo@yahoo.com

AJUWON, A.G.
Reference Librarian,
E. Latunde Odeku Medical, College of Medicine,
University of Ibadan
graceaguwon@yahoo.com

ABSTRACT

This study was to determine faculty's knowledge, access and use of e-resources, both in terms of numbers, frequency and identify the areas of training needed by faculty to utilize e-resources effectively and efficiently. Descriptive survey method was adopted for the study. The population comprised of lecturers in the two medical colleges of University of Ibadan and University of Lagos. The study instruments were questionnaire, observation and interview methods. Findings revealed that faculty were quite knowledgeable about the e-resources available at the two Colleges of Medicine (Ibadan and Lagos) averaging 80%. The major reason for using electronic resources was for communication CMUL (89.2%), CMUI (91.5%). Other reasons for the use of electronic were for research CMUL (78.3%), CMUI (76.8%), and teaching CMUL (74.7%), CMUI (67.1%). Limited access to some resources (60.2%), inadequacy at meeting information needs (58.5%) and unstable internet connectivity were the major causes of non use of electronic resources by the academic staff of the colleges. It is recommended that parent institutions should view the investment on the purchase/subscription of resources as well as ensuring that physical facilities like provision of power and computer hard and soft wares as essential and worthy investing if these university medical colleges are to achieve and remain world class medical colleges.

Keywords: electronic information resources, academic staff , medical colleges

Introduction

Application of electronic information resources is essential for the teachers and students in tertiary education. Today, computer access to the medical literature has become more convenient than ever before with MEDLINE on CD-ROM and on line. Computerized literature searching enables the user to efficiently identify germane articles and research studies (Ogunyade and Oyibo, 2003). The introduction of ICT and its continued growth and utilization by medical professionals have shown that the use of computerized information systems can improve the quality of health care, enhance the use of evidence based treatments and maintain an update knowledge (Lobach and Hammond, 1997; Hunt, Haynes, Hanna, and Smith, 1998); and (Ogunyade, and Ibegwam, 2011). Romanov and Aarnio (2006) assert that one of the major goals of medical education is to encourage students to maintain their knowledge of medical science by becoming life-long learners. Adequate skills in information seeking and regular use of original scientific sources are key elements in this process. Haux (1998) further states that with regard to medical informatics education, both information processing and information technology have been considered relevant for the quality of health care.

It has been observed that changes in technology in recent years have dramatically altered how information is accessed, stored, and disseminated, whereas information provision in academic medical libraries was previously based upon the collection of physical library material, it is now increasingly the case that the academic medical library are making their collection into the virtual arena (Hewitson, 2002). The situation has now changed with the advent of computers and telecommunications technologies. Medical libraries can now provide access to information and on a local, regional, national and international basis, through work-stations such as personal computers (PC) and terminals. Academic staffs are now faced with a multitude of information sources available from their desktops. Nwalo (2000) opined that information technologies found in libraries at present can be divided into three categories computers, storage media, and telecommunications. These three aspects, working together have brought about great improvement in the quantity and quality of library services to user and an amazing reduction in the delivery time. The fusion between computer and telecommunication has enhanced the development of information network around the world; the high point of which is the internet.

Ibegwam, (2004) observed that the internet has become an important component of the electronic services in academic institutions and has permeated all aspects of life, breaking down barriers to communication and information access worldwide. Cochrane and Henderson (1992) reported that libraries are computerising their services all over the world and to take advantage of the immense benefits in information management offered by information technology, a library must first computerize its services. Al-Baridi and Ahmed (2000) and Hewitson (2002), are of the opinion that the provision and use of electronic information services have become increasingly important in academic libraries in recent years. Libraries have been moving towards an electronic environment, in which sufficient computers are necessary for patrons to access information. At present libraries are providing electronic access to a wide variety of resources, including indexes, full-text articles and complete journals (Sweeney, 1997). The consequence of these changes has had a dramatic effect on the way that teaching, learning and research are

carried out in the medical education. As change has been so dramatic, this raises important question as to whether academic staffs are fully aware of the potential of IT and have skills to fully utilize them in their work.

Despite the developments in the use of IT in the university environments in the region, Mutuwa (2001) reported that most countries of eastern and southern Africa and the whole sub-Saharan region still lag behind in comparison to their western counterparts. He further stated that most university libraries within the region have limited access to modern computing and communication technology, so it is difficult for teachers and students to keep abreast of current developments in their academic areas. In similar studies conducted by Popoola,(2008), Chisenga (1999), Aiyepeku (2001), Oladele (2001), it was reported that in spite of the identified benefits of IT vis-a-vis the evolution of the internet as a solution to information need of academics and researcher in African universities, there is a short fall in African oriented research. Studies reveal various reasons, to include digital divide, inadequate awareness of the benefits of the internet, cost of internet technology and access, inadequate training skills, lack of resources, poor writing culture, culture of secrecy in African Society, quality and relevance of African work among others as the cause of the problem. Kawooya (2006); Adeya, Oyelarin-Oyeyinka (2004); Ehikamenor (1999); Adeogun (2007) and Agaba (2004) suggested that African universities and many other research oriented institutions should encourage their academic and research staff to publish their work on the open access journals on the internet.

The usefulness of electronic information resources to both the scholars and students have been variously reported by Kaur and Verma (2009) Lobach et al, (2007) Romanov and Aarnio (2006); Ogunyade and Ibegwam (2005); Ogunyade and Oyibo, (2003). Although some scholars have argued that awareness and acquisition of IT does not necessarily lead to immediate application or use. Renwick (2009) Gilmore (1998) and Young (1998) have observed that there are more computers and other information technologies in university nowadays and that the use of these technologies has in many cases, not enhanced either individual or institutional level of productivity. The reasons advanced for this includes inadequate training of lecturers in new skills, and unwillingness by some of these lecturers to learn new skills. Saravanan1,K and Renwick, (2009) noted that successful use of electronic-resources (e-resources) depends on many factors such as their disciplines, academic status, ranks, ages, access to the hardware and location of the electronic resources and training. He further stated that factors motivating use include the level of importance they allotted to e-resources, how useful they have found them, and for which purpose they use the resources. The current level of electronic information resources use skills by the academic staff of the College of Medicine University of Lagos and Ibadan and perhaps the role of medical librarian in ensuring that both the students and the teachers are aware and confident in the use of electronic information resources is not known when compared with what is obtained elsewhere in developed countries. In particular academic staff require new skills and competences to navigate, find, evaluate and use electronic information resources.

For the purpose of this research work electronic information resources refer to materials that can be accessed from information sources using electronic means. Examples of electronic information resources include electronic books and journals, the internet, abstract and indexing services (MEDLINE) and CD-ROMS. This study thus investigated the awareness and use of

electronic information resources by academic staff of two first generation medical colleges, the Colleges of Medicine of universities of Lagos and Ibadan.

The Problem

Like many other institutions in Nigeria, the Colleges of Medicine, Universities of Lagos and Ibadan, have invested significantly in e-resources acquisitions for use by academic staff and students. The shifts from printed forms of information resources to electronic information material should lead to better quality , efficient and effective research, if used by academic staff and students. In spite of several Workshops and other forms of awareness created by the library management to sensitise the academic staff on the usefulness of electronic information resources, coupled with the fact that the library plays a leading role in faculty-library relationships and in instructional services such as orientation and training in use of library resources and web based searches, they have not effectively utilized these information resources. This is evident from the low number of requests made for articles through electronic journals and other scholarly databases from medical library, as well as the number of staff that have visited the library to collect the users identification numbers and password for the institutionally based on- line data bases like the HINARI OARIE and AGORA that may be accessed either though their personal computer in the offices, their laptop or the learning resources unit of the medical library where over one hundred and forty   personal computers that are connected to the internet are housed.

Objectives

The major objectives of the study were to determine faculty's knowledge, access and use of e-resources, both in terms numbers and frequency and identify the areas of training needed by faculty to utilize e-resources effectively and efficiently. It will also discover problems associated with their utilization and make recommendations solutions on how best such resources can be utilized. The study will also provide vital information to medical colleges of the universities and medical library management by identifying administrative and technical bottlenecks and measures of dealing with them.

Study Area

The survey was conducted at the two first generation Colleges of Medicine in Nigeria at Lagos and Ibadan respectively. The two colleges of medicine were established by the Nigerian government to produce highly trained manpower, conduct research into health related problems in order to deliver quality health care to the citizenry. The College of Medicine, University of Lagos was the first Nigerian College of Medicine to be established on the 13th April, 1962 as an autonomous unit of the University of Lagos. College of Medicine University of Lagos comprised of the Schools of Clinical Sciences, Dental Sciences, Basic Medical Sciences and Pharmacy (CMUL Prospectus, 20112012), now having the status of faculties.

Learning support services were provided by the medical library for the research, learning and teaching needs of staff and students. The library, established in 1962, plays a crucial role in ensuring that these resources are effectively and efficiently used. This is reinforced by the physical presence of professional librarians at the service points in their bid to assist all users. The library also serves medical and para-medical staff of Lagos University teaching Hospital

(LUTH), one of the first-generation teaching hospitals established by the Nigerian government to deliver quality health care to its people. Presently, the medical library has over one hundred and forty (140) networked computers which provide access to the internet. The library also subscribes to more than 5000 electronic journals with full articles from different fee based and non-fee based online bibliographic databases like HINARI, EBSCOHOST, MEDLINE, PUBMED, Map of Medicine, JSTOR. among others. This is in addition to some books in the C.D-ROM format and free books on line for health professionals. Not all library procedures have been automated, but computers are used for searching biomedical databases and accessing the internet as a teaching resource.

The College of Medicine, University of Ibadan, was a former faculty of medicine University College Ibadan, established in 1948 but was granted College of Medicine status in 1980 (College of Medicine, University of Ibadan Prospectus, 2002/2006).). The College comprises the faculties of Basic Medical Sciences, Clinical Sciences, Public Health, Dentistry and Pharmacy (CMUI, Prospectus 2002/2006. The medical library of the college named E. Latunde Odeku Medical library was established in 1966 to provide the learning support for both the staff and students however, it also serves medical and para-medical staff of the University College Hospital, Ibadan as well as individuals from other institutions across the country. Like other similar institutions, the medical library, College of Medicine University of Ibadan command respect and resources for its users, the library has access to more than 5000 full text electronic journals through HANARI, and other computer aided instructions and interactive software that include; MEDLINE on CD-ROM, Pubmed, HELIN, COCHRANE and other on-line databases. Though not fully automated yet, the Latunde Odeku Medical library was in 1989 designated as the National Focal Point (NPF) for Nigeria and the National Medical Library for Nigeria (NML) by WHO, Thus, it provides resources for other libraries in the area of health industry.

Methodology

The study population comprised lecturers in the two medical colleges of University of Ibadan and University of Lagos respectively. The research design is a survey type and data were collected in the first quarter of 2011 through the use of questionnaire, observation and interview methods. The questionnaire was structured to clearly identify the important variables relating to the objectives of this study. This included personal background of the respondents such as age, gender, faculty and designation. The second part contain questions on computer use, level of computer literacy, location, access to the internet, frequency of use and time spent on the computer. The third part examines the participants' knowledge and use of electronic resources. Lastly the respondents were to identify problems associated with computer use and to determine what training the participants had, as well as their training needs. The statistics available from the two medical college libraries records gave the total number of registered academic staff (2011/2012 academic year) as 350 which cut across four (4) faculties as follows: Pharmacy, Clinical Sciences, Dentistry, and Basic Medical Sciences. The paper adopts a stratified random sampling method to select three hundred (300) out of 350 academic staff using the electronic resources in two medical libraries in Lagos and Ibadan respectively. The participants were selected because they engaged in teaching and research and also because they use electronic

resources made available by the medical libraries studied. The results were expressed in percentages depicted on tables.

Results

Of the 300 respondents, 165 (55%) of them responded and questionnaires were found valid for analysis. Respondents were selected from the four (4) faculties of the Colleges of Medicine, University of Lagos (CMUL**)** and the Colleges of Medicine Ibadan (CMUI**)** respectively. Of the 165 respondents, 125 (75.8%) respondents were male while 40 (24.2%) were female as indicated in the table I and 2 below.

Table 1   Respondents by Faculties (n=165)

Faculty	Male		Female		Frequency		Percentage (%)	
	CMUL	CMUI	CMUL	CUMI	CMUL	CMUI	CMUL	CMUI
Pharmacy	16	16	4	6	20	22	24.1	26.8
Clinical Sciences	15	14	5	5	20	19	24.1	23.2
Dentistry	14	12	6	4	20	16	24.1	19.5
Basic Medical Sciences	18	20	5	5	23	25	27.7	30.5
Total	63 (38.2%)	62 37.6%)	20 (12.1%)	20 (12.1%	83	82	100	100

Table 1 depicts the gender of respondents with the male respondents (75.8%) being higher than the female respondents (24.2%), majority of who were the faculty of basic medical sciences. Respondents from CMUL and CMUI were 83 (50.3) and 82 (49.7%) respectively.

Table: 2   Respondents according to their designations (n=165)

Title	Male		Female		Frequency		Percentage (%)	
	CMUL	CMUI	CMUL	CUMI	CMUL	CMUI	CMUL	CMUI
Professor	7	5	2	2	9	7	10.8	8.5
Associate Professor	6	7	2	2	8	9	9.6	11.0
Senior Lecturer	10	11	5	6	15	17	18.1	20.7
Lecturer I	18	19	6	5	24	24	29.0	29.3
Lecturer II	15	12	3	4	18	16	21.7	19.5

Assistant Lecturer	7	8	2	1	9	9	10.8	11.0
Total	**63**	**62**	**20**	**20**	**83**	**82**	**100**	**100**

Majority of the respondents were lecturer 1 (29.0%) and the least, associate professor (readers) (9.6%). Respondents were asked about the availability and use of computers in their faculties, departments, and the medical library. Majority of the respondents agreed to have used the computer at various locations as shown in table 3. CMUL 70 (84.3%) and CMUI 65(79.3%) claimed to have used the computers at home while 72 (86.7%) from CMUL and 75 (91.5%) from CMUI used the computer in their offices. Use of the institutions medical libraries' computers was quite low 45(54.2%) at the CMUL and 38 (46.3%) at the CMUI. This is despite the fact that the libraries' personal computers were connected to the internet. Very few lecturers (9.6%) CMUL, (13.4%) CMUI looked elsewhere for access. These 'elsewhere' included the cyber cafes (70: 42.4%) as well of the 1 phone (10:61.8%) and 1 pads (132: 80.0%).

Table 3: Availability, Access and use of Computers by Respondents (n=165)

Location of Access	No. of persons with access to computer		No. of computers with internet access		% of persons who use computer at each location		Total % of persons with internet access	
	CMUL	CMUI	CMUL	CUMI	CMUL	CMUI	CMUL	CMUI
Home	70	65	30	30	84.3	79.3	36.1	39.0
Office	72	75	45	33	86.7	91.5	54.2	40.2
Medical Library	45	38	64	55	54.2	46.3	54.2	46.3
Elsewhere	8	11	6	9	9.6	13.4	7.2	11.0

Respondents were asked about their knowledge and use of electronic resources. Findings revealed that faculty were quite knowledgeable about the e-resources available at the two Colleges of Medicine (Ibadan and Lagos) averaging 80%. (See table 4 below)

Table 4: Electronic resources used by respondents (n=165)

Resources	Use		Don't Use		Don't Know it		No Response	
	CMUL	CMUI	CMUL	CUMI	CMUL	CMUI	CMUL	CMUI
CD-ROM Databases	32 (38.6%)	29 (35.4%)	25 (30.1%)	27 (32.9%)	3 (3.6%)	5 (6.1%)	23 (27.7%)	21 (25.6%)
MEDLINE	55 (66.3%)	59 (72.0%)	14 (16.9%)	7 (8.5%)	4 (4.8%)	4 (4.9%)	10 (12.0%)	12 (14.6%)
Internet / web	68 (82.0%)	72 (87.8%)	9 (10.8%)	4 (4.9%)	0 (0%)	0 (0%)	6 (7.2%)	6 (7.3%)
Email	64 (77.1%)	63 (76.8%)	8 (9.6%)	9 (11.0%)	0 (0%)	0 (0%)	11 (13.3%)	10 (12.2%)
Search Engines	34 (41.0%)	47 (57.3%)	30 (36.1%)	17 (20.7%)	7 (8.4%)	5 (6.1%)	12 (14.5%)	13 (15.9%)

PubMed	35 (42.2%)	33 (40.2%)	20 (24.1%)	22 (26.8%)	10 (12.0%)	14 (17.1%)	18 (21.7%)	13 (15.9%)
HINARI	30 (36.1%)	32 (39.0%)	22 (26.5%)	20 (24.4%)	13 (15.7%)	15 (18.3%)	18 (21.7%)	15 (18.3%)
EBSCOHOST	17 (20.5%)	15 (18.3%)	11 (13.3%)	20 (24.4%)	28 (33.7%)	19 (23.2%)	27 (32.5%)	28 (34.1%)
AJOL	23 (27.7%)	30 (36.6%)	30 (36.6%)	22 (26.8%)	19 (22.9%)	16 (19.5%)	11 (13.3%)	14 (17.1%)

Those resources that were available on the internet were used more by respondents: Internet/web; CMUL (82.0%), CMUI (87.8%), E-mail; CMUL (77.1%), CMUI (76.8%), Search Engines; CMUL (41.0%), CMUI (57.3%), Pub Med; CMUL (42.2%), CMUI (40.2%) and HINARI; CMUL (36.1%), CMUI (39.0%). This finding concurs with those who stated that those who were more computer literate tended to use the internet as the e-resources of choice.

Table 5: Academic staff reasons for using electronic resources (n=165)

Reasons	Frequency		Percentage	
	CMUL	**CMUI**	**CMUL**	**CMUI**
Research (latest/current literature)	65	63	78.3	76.8
Teaching Purposes	62	55	74.7	67.1
Conference Paper	39	45	47.0	54.9
Presentation Preparation	49	52	59.0	63.4
Book Solution	34	31	41.0	37.8
Easy Communication	74	75	89.2	91.5
courses and programmes	45	33	54.2	40.2

With regard to reasons for using electronic resources (see table 5), the highest use was for communication CMUL (89.2%), CMUI (91.5%). Other major reasons for the use of electronic were for research CMUL (78.3%), CMUI (76.8%), and teaching CMUL (74.7%), CMUI (67.1%).

Table 6: Factors inhibiting academic staff use of electronic resources (n=165)

Factors	Frequency		Percentage	
	CMUL	**CMUI**	**CMUL**	**CMUI**
Lack of necessary skills	19	17	22.9	20.7
Lack of time	25	30	30.1	36.6
Inadequacy of existing facilities	44	31	53.0	37.8
Slow speed or poor bandwidth	23	21	27.7	25.6
Poor sensitization	19	14	22.9	17.1
Unstable Internet connectivity	45	39	54.2	47.6
Unfamiliar / difficult interface	25	33	30.1	40.2

Inadequate at meeting information needs	31	48	37.3	58.5
Limited access to some resources	50	60	60.2	63
Location	35	27	42.2	32.9

Table 6 shows that limited access to some resources (60.2%) and inadequacy at meeting information needs (58.5%) and unstable internet connectivity is 4.28, were the major causes of non use of electronic resources by the academic staff of the two Medical Colleges.

Table 7: Training needs by respondents (n=165)

Areas of training	Essential		Useful		Not Useful		No Response	
	CMUL	CMUI	CMUL	CUMI	CMUL	CMUI	CMUL	CMUI
Library computerized catalogue	19 (22.9%)	21 (25.6%)	41 (49.4%)	42 (51.2%)	8 (9.6%)	11 (13.4%)	15 (18.1%)	8 (9.8%)
CD-ROM Databases	22 (26.5%)	27 (32.9%)	39 (47.0%)	41 (50.0%)	10 (12.0%)	8 (9.8%)	12 (14.5%)	6 (7.3%)
Finding Information on Internet	29 (35.0%)	25 (30.5%)	43 (51.8%)	47 (57.3%)	5 (6.0%)	4 (4.9%)	6 (7.2%)	6 (7.3%)
Online Databases	25 (30.1%)	20 (24.4%)	30 (36.1%)	23 (28.0%)	13 (15.7%)	20 (24.4%)	15 (18.1%)	19 (23.2%)
Online Journals	20 (24.1%)	21 (25.6%)	43 (51.8%)	41 (50.0%)	8 (9.6%)	6 (7.3%)	12 (14.5%)	14 (17.1%)
E-mail	33 (39.8%)	31 (37.8%)	41 (49.4%)	41 (50.0%)	6 (7.2%)	5 (6.1%)	3 (3.6%)	5 (6.1%)

The need to access electronic mail were essential useful resources (77.6%) for needing training to access electronic resources by academic health professional. On the other hand, access to library computers/catalogue ranked the least in the health professional needs for training on the use of e-resources.

Table 8: Preferred format for training by respondents (n=165)

Mode of Training	Frequency		Percentage Aggregate %	
	CMUL	CMUI		Ranks
Workshop	54	49	62.4%	1
Presentation at a meeting	5	6	6.0 %	6
One-on-One demonstration	32	35	38.6 %	2
Online tutorial	21	22	26.1%	5

Self-help guides	23	21	26.7%	4
Support when needed	27	31	35.2%	3
No preference	5	6	6.6%	6

The most preferred format for training desired by the respondents were through a worksheet (62.4%). One-on-One demonstration ranked second with (40.6%). The least preferred training formats were present action at meeting (6.6%).

Discussions, Conclusions and Recommendations

Majority of the respondents were men giving the impression that the male folk still dominate the medical profession. This may not be unrelated to the cultural habit of Nigerians that put the education of a male child above that of the female child that will be 'married off' and the investment made on her become a waste. The lecturers I to senior lecturer cadre had the greater population of respondents. This may not be unrelated to the fact that the categories from the bulk of the human resources in most higher institutions in Nigeria. They have the duty of doing most of the teaching as these are still being mentored at these levels. The greater population of the respondents had internet access and used them at home, at the office and the medical libraries in the descending orders. This is similar to the findings of Saravanan1 and Ravi (2011) in the Medical Colleges in Puducherry who found that more than half of the students and faculty members have internet connection in their home and observed that majority of the respondents highly use (www) e-mails and voicemails for their research purpose. The 1 pads and 1 phones and blackberry were also preferred media for accessing on-line databases by health professionals in the two colleges in relation to the cyber cafes. This may be due to the fact that the unconducive atmosphere in most cyber cafes fo categories of people like the medical professionals

Another possible reason for the low use of the cybercafés may be because they are likely to meet their students in such places. It is also possible that since most medical professional are well paid when compared to the other professionals, most have the financial means to purchase and use 1-phones and 1-pads, which the result showed are related, well used by the health professionals under study. Moreover, these ICT gadgets are very handy for a physician that wants to use them to verify medical information during consultation on-line and promptly. The WWW, the emails and Medline database were the most used electronic resources of the medical professional of these colleges. This may be due to the fact that these resources have been around for long time than the others. It is disappointing to note that EBSCO host and African journals on line were not very popular. This is because African journals on online for instance are journals whose research methodology most related to those of medical scientists in Nigeria. It is also a depot for research findings on health issues, diseases that endemic to the African continent. It is suggested that the health sciences libraries may need to give these data bases more publicity as well make concerted effort at teaching these health professionals the way to do expert searches on these databases.

Limited access to some e-resources, unstable internet connectivity and inadequacy of existing facilities topped the list of reasons to the inhibiting factors in the use of electronic resources by the respondents. This affirms the findings of Ranganathan (2011) where 31 (25.83%) respondents have faced problems of lack of time followed by 24 (20%) faculty

members indicating lack of training as the main problem while using electronic resources. Some faculties 15 (12.5%) and 21 (17.5%) are troubled by insufficient hardware and software problems respectively. The implication of this for the institution is that more investment must be made in the subscription of bandwidths that will allow speedy internet access even when many people are connected to the internet at the same time. There is also need to phase out old PC with new ones that have higher gigabytes. This will enhance stability of internet connectivity. Another way of ameliorating the constant internet problem of limited access to resources is to ensure that there is connectivity in the houses and offices of staff, this especially possible for those staff that are residing in the campus accommodation. For those of them who are not accommodated on the campus, there should be an incentive for loan or grant meant solely for the purchase of PCs 1 phones, 1pads and subscription of internet access using modem from any of the several telecom innovative companies in Nigeria that offer external services.

Finding information on the internet and through the online database for many of the health profession in CMUL essential areas for training while the essential areas of medical profession in CMUI were CD-ROM database and the internet. Also of interest is that even the use of the email is still an essential area for training for many of the respondents. The implication of this is the medical librarians still need to seat up and meet these needs through organizing training at time at period that will be conducive to their health professionals. There is also the implication that the librarians must update their knowledge of new databases and newer search strategies through personal development, attending workshops, seminars and conference that train trainers.

The parent institution must encourage them by sponsoring them to these workshops and seminars. The librarians should take advantage of the step B intervention of the Tertiary Fund (TETFund) of the government to ensure that their knowledge is constantly renewed and updated. The preferred methods of training by the respondents were workshops, one on one demonstration and support when needed. Even though the one-on-one demonstration and support where needed may not always be convenient for the librarian, the medical librarians must realize the library is now being taken to the user and not the traditional method of the user visiting the library. In order to do this the librarian will need to make some adjustments. This position supports the view of Ukachi (2012) and Gbaje and Ukachi (2012). It is therefore important that today's medical librarians must device innovative ways of meeting their new needs of their users. This will also ensure that they remain and essential members of the health team.

Conclusion

Most of the academic staff members of Medical College of Medicine, University of Ibadan and University of Lagos are aware of availability of electronic information resources that will assist them in teaching, research and learning. However, there are inhabited from using them maximally due to limited access of some of the resources, unstable internet connectivity and inadequacy of the existing electronic resources. Training on how to access e-mails, online databases and locating needed information on the internet topped the least of training needs of these health professionals.

Recommendations

It is therefore recommended that:

1.   Librarians should find more innovative ways of taking the library to this catering of users by ensure that these expressed needs for training is met.

2.   The librarian should take every available opportunity to train and retrain themselves on the newest database and newest such strategies on the area of medium and allied health, this will enable them meet up with the expecting of health professional as well as make the librarians relevant members of the health team.

3.   Since limited access to some electronic resources topped the list of inhibitions it behoves medical librarians to research further on how to liberalise access to e-resources to its clients so as to ensure greater access and use by the academic staff of their institutions. One way of doing this may be to publicise the user identification number and user passwords with a proviso that it must not be posted online, nor should it be used by people who are not staff or students of the institution for which the password and user identification number are meant.

4.   Since the major reasons for seeking e-resources were to communicate, research and make use of the most current literature and for teaching, it is recommended that parent institutions should see the investment on them as well as ensuring that physical facilities like provision of power and computer hard and soft wares are essential and worthy investing if these university medical colleges are achieved and remain world class medical colleges. It is also needful to investigate the awareness and use of electronic resources in the faculties of humanities, social science and sciences of the University to discover if they follow the patterns similar to those of the colleges of medicine.

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