

## **Editorial**

There are seven articles in this current edition focusing on various issues within the three strands of the library and information science profession.

The first two articles are devoted to information use by women. While the first article by Obasola and Mabawonku is on the application of ICT in accessing information on maternal and child health in Nigeria, the second article by Adekannbi and Dada is specifically on the preference of women's use of media in disseminating information on HIV/AIDS by exploring the women's level of awareness of HIV/AIDS, types of media used to disseminate information and create awareness among them, and women's behavioral change as a result of HIV/AIDS information. The third paper by Yeboah, Adams and Akotia is refreshingly different as it focuses on sports. The application of records management practices in unique profession such as football has not been investigated before and hence the study. The paper sought to evaluate the nature and scale of the Ghana Premier League Board's records management practices. It emphasises the importance of managing and keeping records in football. The fourth and fifth papers apply bibliometrics concept in the ranking of research publications and the impact of scholarly and judicial journals. The paper by Okon, Ngulube and Onyanacha examines the patterns of publication output in library and information science (LIS) research in Nigerian universities from 2000 to 2014. The paper discusses the trend in publication output in LIS research, the most visible (productive) universities and authors, the most cited universities and authors, and publication sources. Bopape's paper examines the impact of South African legal journals' content, by examining the number of times these journals have been cited and mentioned in subsequent legal journal articles and judicial decisions (judgments).

The sixth paper by Asubiaro captures the importance of assessing the cyberspace presence of academic libraries in Nigeria. The paper addresses issues pertaining to the number of academic libraries in Nigeria that have own websites, availability of library links in university homepages, visibility of academic libraries on the Internet, web impact factor of academic libraries on the Internet, and the relationship that exists among the libraries on the Internet. The last article in this issue by Igbo and Imo, examines the opportunities and challenges of electronic information resource sharing among Nigerian university libraries.

# AFRICAN JOURNAL OF LIBRARY, ARCHIVES AND INFORMATION SCIENCE

VOLUME 27 NUMBER 1 APRIL 2017

## CONTENTS

	Page
<b>Oluwaseun I. Obasola and Iyabo M. Mabawonku</b> Women's Use of Information and Communication Technology in Accessing Maternal and Child Health Information in Nigeria .....	1
<b>Janet Adekannbi and Kehinde I. Dada</b> Women's Preference for Folk/Modern Media in Disseminating HIV/AIDS Information in a Selected Rural Community in Oyo State, Nigeria .....	17
<b>Thomas Nuamah Yeboah, Musah Adams and Pino Akotia</b> Records Management and Football Administration in Ghana .....	29
<b>Okon E. Ani, Patrick Ngulube and Omwoyo Bosire Onyancha</b> A Bibliometrics Analysis of the Visibility of Library and Information Science Research in Nigeria in the Web of Science, 2000-2014 .....	41
<b>Solomon Bopape</b> Measuring the Scholarly and Judicial Impact of Accredited Legal Journals in South Africa .....	53
<b>Toluwase Asubiaro</b> An Assessment of the Cyber Presence of Academic Libraries in Nigeria .....	65
<b>Harriet U. Igbo and Nwabuisi T. Imo</b> Electronic Information Resource Sharing Among University Libraries in Southern Nigeria: Opportunities and Challenges .....	77
<b>From the Publishing Editor's Desk.</b> .....	93

# CONTENTS

	Page
<b>Oluwaseun I. Obasola and Iyabo M. Mabawonku</b> Women's Use of Information and Communication Technology in Accessing Maternal and Child Health Information in Nigeria .....	1
<b>Janet Adekannbi and Kehinde I. Dada</b> Women's Preference for Folk/Modern Media in Disseminating HIV/AIDS Information in a Selected Rural Community in Oyo State, Nigeria .....	17
<b>Thomas Nuamah Yeboah, Musah Adams and Pino Akotia</b> Records Management and Football Administration in Ghana .....	29
<b>Okon E. Ani, Patrick Ngulube and Omwoyo Bosire Onyancha</b> A Bibliometrics Analysis of the Visibility of Library and Information Science Research in Nigeria in the Web of Science, 2000-2014 .....	41
<b>Solomon Bopape</b> Measuring the Scholarly and Judicial Impact of Accredited Legal Journals in South Africa .....	53
<b>Toluwase Asubiaro</b> An Assessment of the Cyber Presence of Academic Libraries in Nigeria .....	65
<b>Harriet U. Igbo and Nwabuisi T. Imo</b> Electronic Information Resource Sharing Among University Libraries in Southern Nigeria: Opportunities and Challenges .....	77
<b>From the Publishing Editor's Desk.</b> .....	93

## AIMS AND SCOPE

African Journal of Library, Archives and Information Science is established mainly to provide a forum for librarians, archivists, documentalists, information scientists and other information related professionals in Africa to report their research findings but with emphasis on African setting. The Journal is refereed by distinguished scholars. Emphasis is on empirical research; however, manuscripts of high quality on theoretical aspects of the three information related disciplines will be considered for publication.

## MISSION

To provide on a regular and sustainable basis an excellent scholarly journal for reporting empirical research findings in the information profession in Africa

## VISION

To be the main resource base for library, archives and information science research in Africa

## NOTES TO CONTRIBUTORS

Contributors are to submit the manuscript by e-mail file attachment. The title, author's name, position and place of work should appear on the first page. Subsequent pages, not more than 15, should include an informative abstract of not more than 100 words. A manuscript will be considered only if it has not been published elsewhere.

References and notes should be indicated in the text by names of authors and date of publication in brackets. The list of references should be listed in an alphabetical order at the end of the text.

- (a) References to journal articles should be in the following order: author(s), date, title, journal's name in italics, volume number, issue number and inclusive pagination e.g.

Mazikana, P.C. (1987). Archives and Oral history: Overwhelming lack of Resources. *Information Development*, 3 (1), 13-16.

If it is an electronic source provide the URL and the date the journal article was accessed.

- (b) References to books should be in the following order: author(s), date, title in italics, place publication, name of publisher, pagination e.g.

Aboyade B.O (1989). *The Provision of Information for Rural Development*. Ibadan: Fountain Publications, 104p.

If it is an electronic source provide the URL and the date the book/monograph was accessed.

- (c) References to contributors in collected works should be in the following order: author(s), date, title of contribution, name of the editor, title of the collected works in italics, place publication, name of publisher and inclusive pagination e.g.

Alemna A. A. (1995) Agricultural Information Services in West Africa. In: Aina, L.O., Kaniki, A.M. and Ojiambo, J.B. (Eds.) *Agricultural Information in Africa*. Ibadan: Third World Information Services, pp.67- 82.

No charge is made for publication. Reprints of articles will be made available to authors.

Manuscripts and other editorial materials should be simultaneously directed to the Acting Editor-in-Chief, Professor Omwoyo Bosire Onyancha, University of South Africa, Pretoria, South Africa ([onyanob@unisa.ac.za](mailto:onyanob@unisa.ac.za)) and the Publishing Editor, Professor Iyabo Mabawonku, University of Ibadan, Ibadan, Nigeria ([imabawonku@gmail.com](mailto:imabawonku@gmail.com)).

# Women's Use of Information and Communication Technology in Accessing Maternal and Child Health Information in Nigeria

**Oluwaseun I. Obasola**

E. Latunde Odeku

Medical Library, College of Medicine,  
University of Ibadan,

Ibadan, Oyo State, Nigeria

*oobasola@cartafrica.org*

and

**Iyabo M. Mabawonku**

Department of Library, Archival and Information  
Studies, Faculty of Education, University of

Ibadan, Ibadan, Oyo State, Nigeria

*imabawonku@gmail.com*

## Abstract

*This study investigated the use of information and communication technology (ICT) by women in Nigeria to access maternal and child health (MCH) information, as well as the influence of its use on their health practices. As the relevance of ICT increases as a vital tool for communicating MCH information, an understanding of its use by women to access such information becomes pertinent. A total enumeration of health facilities in Nigeria with the ongoing e-health projects was conducted. A short questionnaire was completed by 1001 women selected out of 4975 registered mothers at these health facilities, using the convenience sampling technique. Nine focus group discussion sessions were also conducted with 30 mothers. MCH information was accessed through mobile phones (76.0%), radio (66.9%), television (55.1%), the Internet (27.3%), and the public address system/projector (2.5%). The MCH*

*information themes accessed were on: appointment reminders (45.0%), emotional changes (39.5%), family planning (34.0%), nutrition (32.8%), medication (30.6%), and breastfeeding (26.0%). Constraints such as unreliable power supply, cost and poor mobile phone network limited the use of ICT. This study has identified the mobile phone as an important ICT tool used in accessing MCH information. It also showed that the use of ICT tools to access MCH information can influence the health practices of women, either positively or negatively. This has implications for policy formulation and design of ICT-powered MCH intervention programmes.*

**Keywords:** Women, Maternal and Child Health Information, ICT Use, Nigeria

## Background

Maternal health, defined as the well-being of women during pregnancy, childbirth and the postpartum period, is a very important issue that relates to a critical period in a woman's life (WHO, 2012; WHO, 2016; Adamu 2012). The reproductive years are the most productive for a woman, in which she strives to utilise her potential and contribute economically as a citizen of a nation. Unfortunately, in Nigeria, this period has been associated with many complications and, in some cases, deaths (Adamu, 2011; WHO, 2012; WHO, UNFPA, and The World Bank, 2012; Victora, Requejo, Barros, Berman, Bhutta, Boerma, Chopra, de Francisco, Daelmans, Hazel, Lawn, Maliqi, Newby, and Bryce, 2016). In 2010, about 40,000 Nigerian women died in pregnancy, while 1 to 1.6 million suffered from serious complications of pregnancy and childbirth, including

severe bleeding after childbirth, infections, hypertensive disorders, and unsafe abortion ( USAID, 2012; WHO and UNICEF, 2012; WHO, UNICEF, UNFPA, and The World Bank, 2012).

Most of the complications that women encounter in pregnancy and childbirth significantly contribute to the high morbidity and mortality for women of reproductive age in Nigeria (Adamu, 2011; Cooke and Tahir, 2013). These complications have been linked to the unhealthy practices women adopt during pregnancy because of misinformation or inadequate information about available health services. Women also lack awareness on the symptoms of complications in pregnancy; consequently, many of them engage in unhealthy practices during pregnancy (Federal Ministry of Health Nigeria, 2011; Doctor, Bairagi, Findley, Helleringer and Dahiru, 2011). At the micro level, high maternal mortality has underlying consequences on the survival of children under the age of five, and on the social and economic welfare of families. At the macro level, high maternal and child mortality has been linked to low productivity level in many countries, resulting in a loss of about \$15 billion globally (USAID, 2001; Joshi, 2012).

ICT has been identified as an important tool which can be integrated into health systems to accelerate the desired progress toward reducing maternal and child health mortality (Yamuah, 2005). This recognition has led to the development of several ICT-based (e-health) projects for promoting MCH in developing nations, to improve MCH outcomes (Victoria and Nicogossian, 2011). As a result, more women are increasingly embracing the use of ICT tools to access health information to meet their health information needs (Gao, Larsson, and Luo, 2012). They no longer rely solely on books or health talks during antenatal clinics. According to Lagan, Sinclair and Kernohan (2010), the use of ICT tools, such as the Internet, mobile phones, radio and television, to access health information most of the time gives women more control over decisions affecting their pregnancy, unlike when they relied solely on other sources. Another reason indicated by women for turning to ICT tools for accessing health information is inadequate access to

professionals who can meet their health information needs (Sacks and Abenheim, 2013).

In spite of women's adoption of ICT tools in accessing vital health information, Nigeria's maternal and child mortality rate remains unacceptable (Victora, et al. 2016). This is unlike success stories reported in other countries (Parker, R. M., Dmitrieva, E., Frolov, S. and Gazmararian, J. A. 2012; Musoke, 2002). To ensure effective use of ICT in accessing vital health information and maximise its gains in improving MCH practices; an understanding of women's use of ICT for accessing MCH information and its influence on health practices needs to be explored (Diaz et al., 2002; Rodger et al. 2013; Dalton et al. 2014). Besides, there is a gap in the literature on comprehensive studies reporting the use of ICT by pregnant women and mothers in Nigeria. This study fills this gap and provides valuable information which could facilitate the effective adoption of ICT tools in ICT-based programmes for reaching more pregnant women and mothers in Nigeria.

### **Objectives of the Study**

The objectives of the study were to:

- identify the types of MCH information Nigerian women accessed using ICT;
- determine the types of ICT Nigeria women use in accessing MCH information;
- identify the MCH practices mothers adopt after accessing MCH information using ICT; and
- find out the challenges encountered by mothers when accessing MCH information using ICT.

### **Review of Related Literature**

Several studies have explored the use of ICT as an important tool for accessing health information by mothers in different settings (Jossefson and Hanseth, 2000; Lagan, Sinclair and Kernohan, 2010; Corker, 2010; Cooper, 2013; Ferraz, Almeida, and Matias, 2013; Familusi and Owoeye, 2014; Ezema, 2016). Lagan et al. (2010), in a descriptive survey exploring the use of an ICT platform (the Internet) by 613 women from 24 countries, discovered that a

significant proportion of women (94%) accessed information from ICT platforms to supplement the information previously provided by health professionals. Eighty-three percent of them stated that pregnancy-related information was accessed to improve their decision-making process on their health. This finding corroborates another (Ferraz, Almeida, and Matias, 2013) report in Portugal, which indicated that mothers are becoming increasingly informed through the use of ICT and are demanding more control over decisions that are related to maternity. Likewise, a study in Goteborg, Sweden (Jossefson and Hanseth, 2000) submitted that increased access to MCH information through the use of ICT platforms provided opportunities for patients to become well informed and to be actively involved in their own treatment.

In Africa, women were also able to regularly access MCH information through the use of ICT tools such as mobile phones (Corker, 2010; Cole-Ceesay, Cherian, Sonko, Shivute, Cham, Davis, Fatty, Wieteska, Baro, Watson, Phillips, MacDonald, Hayden and Southall, 2010; Grameen, 2011; Fajembola, 2011; Onoriode, Otunomeruke, Ofuogbu, Mohammed and Anyanti, 2012; Cooper, 2013). For example, in the Republic of Congo, Corker (2010) reported that women accessed information on family planning from *the Ligne verte* hotlines using their mobile phones. Likewise in Malawi, Rwanda and Kenya, mothers were able to access messages on child nutrition and appointment reminders through ICT interventions, such as *Chipatal Chapa Foni*, RapidSMS and Every Child Counts in the three countries, respectively (Cole-Ceesay, Cherian, Sonko, Shivute, Cham, Davis, Fatty, Wieteska, Baro, Watson, Phillips, MacDonald, Hayden and Southall, 2010; Berg, M., Wairiero, J. and Modi, V. 2009; Corker, 2010; Innovation, 2012; Cooper, 2013). Mothers in Ghana, through the MoTECH project, accessed time-specific information and reminders each week in the local dialect for specific treatments. Educational information on foetal development, good health practices, breastfeeding and counsel on challenges during pregnancy was also accessed. In addition, tips for saving money for transportation to health

facilities for delivery and requirement for birthing kits and nutritional information in pregnancy were received using the mobile phone (Obasola, Mabawonku and Lagunju, 2015).

The use of mobile phones for accessing vital health information was also confirmed by Fajembola (2011) and Onoriode, Otunomeruke, Ofuogbu, Mohammed and Anyanti (2012) in Ondo and Gombe States in Nigeria, where pregnant women accessed information on antenatal care, postnatal care, child immunisation, breastfeeding, nutrition in pregnancy, and family planning methods using mobile handsets. This finding, however, differs from Familusi and Owoeye's (2014) result in a study in Ekiti State, Nigeria. Their study indicated that women mostly access reproductive health information through the radio. A study in another state (Enugu) in Nigeria by Ezema (2016) revealed that, apart from friends, health centre, and churches/women organizations, women accessed reproductive health information from ICT platforms such as radio and television.

These studies indicate that women in Nigeria accessed MCH information using ICT tools such as mobile phones, radio and television. This improved women's access to MCH information without being limited by distance (Saleh and Lasisi, 2011; Innovations, 2012). It increased their awareness of health issues and encouraged them to use the available health resources to stay healthy throughout pregnancy and care for their children. Apart from increasing women's awareness about health issues surrounding pregnancy and childbirth, phone consultations equipped women with knowledge for making informed decisions about their health and that of their children. As a result, mothers were able to manage health issues before getting medical help (InterMedia, 2010; Cooper, 2013).

The benefits of ICT notwithstanding, some authors opine that increased access to health information via ICT platforms may pose some challenges (Rodger, Skuse, Wilmore, Humphreys, Dalton, Flabouris, and Clifton, 2013; Sacks and Abenheim, 2013). The first is misinformation or information overload. The authors argue that information accessed through some ICT platforms

are unregulated and may be of low quality or out rightly erroneous. Users of such platforms may be ignorant of these facts. Another challenge is the effect that the use of ICT can have on doctor-patient relationship since patients may repeatedly turn to ICT platforms (the Internet, radio and television programmes) which may lead to misdiagnosis (Diaz, Griffith, Ng, Reinert, Friedmann, and Moulton, 2002; Dalton, Rodger, Wilmore, Skuse, Humphreys, Flabouris, and Clifton, 2014).

These studies stress the fact that for e-mediated health promotion to be successful, an understanding of ICT usage, content preference and its influence on health practices needs to be explored (Diaz et al., 2002; Rodger et. al. 2013; Dalton et. al. 2014;). This is to maximise its benefits, ensure proper coordination and regulation of its use, especially in a developing country, such as Nigeria, where its adoption for health promotion is still at the budding stage. Consequently, a study of this nature is pertinent, as it would provide information which could facilitate the proper positioning of ICT tools in the Nigerian health system, as well as ICT-based programmes for maternal and child health in the country.

## Research Methodology

The study adopted the descriptive survey design. A short questionnaire and focus group discussion (FGD) were used for data collection. This approach was employed to provide a robust overall measure of how mothers use ICT to access MCH information, as well as its influence on their health practices (Tashakkori and Teddlie, 2010). An ethical approval was obtained from the University of Ibadan Ethics Committee before the initiation of data collection.

The total enumeration technique was used to cover all the nine public health facilities with on-going e-health projects in Nigeria at the time the study was conducted. The health facilities had on-going e-health project for MCH, which involved the use of ICT by health workers for communicating MCH information to mothers. Some ICT tools

(mobile phones, laptops, TV/DVD and the Internet) were provided by state government, with support from funding agencies in the nine public health facilities in four states for MCH promotion. These projects were found in four states from four geopolitical zones of Nigeria, namely North-East (Gombe), North-West (Kaduna), South-East (Imo) and South-West (Ondo).

In Ondo State, four health facilities were identified: Basic Health Centre, Molete; Basic Health Centre, Isarun; Basic Health Centre, Igbaraoke; and Basic Health Centre, Iloro from Ifedore Local Government Area (LGA). In Gombe State, two basic health facilities were involved in an ICT-based project: Wange Maternity Centre and Popandi Health Centre, in Kaltungo LGA. Two health facilities, namely Primary Health Centre, Baganje and Tudu Primary Health Centre, Zaria in Kaduna State were also involved in an ICT-based project for MCH. The only health facility in Imo State with an on-going e-health project, Federal Medical Centre Owerri, was also included in the study (See Table 1).

Through the convenience sampling technique, 1001 mothers involved in ICT-based (e-health) projects who were available and also showed interest were enrolled for the study out of 4975 mothers registered at the nine public health facilities. The researchers and the research assistants obtained informed consent from mothers before enrolling them for the study. Only mothers who gave their informed consent were enrolled for the study. A short questionnaire (with a Cronbach Alpha of 0.79 after pre-test) that focused on the use of ICT for accessing MCH information as well as its influence on their health practices was administered. Nine focus group discussion sessions (FGD) were also organised for 30 participants (10 in Ondo State, 8 in Imo State, and 6 each in Kaduna and Gombe States) who were willing to participate to further investigate the use of ICT for accessing MCH information. The data collection period was from September 2014 to June 2015. Out of the 1001 copies of the questionnaire administered, 931 were suitable for statistical analysis, making a response rate of 93%. Descriptive statistics, such as frequency counts and percentages, were used in analysing the data.



**Table 1: Profile of Health Facilities Selected for the Study**

State	E-Health Projects	Local Govt. Area(LGA)	Health Facilities	Total Number of Registered Mothers (N)	Sampled Mothers (n)
Ondo	Abiye Project Supported by Ondo State Government	Ifedore	4	4200	454
Gombe	Society for Family Health Maternal Neonatal Learning Health project.Funded by the USAID	Kaltungo	2	402	295
Kaduna	Mobile community-based Surveillance Project Supported by e-health Nigeria, MacArthur Foundation, Population and Reproductive Health Initiative and Population Council and Kaduna State	Zaria	2	147	98
Imo	Government mhealth services at Federal Medical Centre Funded by the Federal Government	Owerri Municipal, GA	1	226	154
<b>Total</b>			<b>9</b>	<b>4975</b>	<b>1001</b>

**Source:** Data were collected from the records of the selected health facilities in 2014

## Findings of the Study

### Demographic Characteristics of the Respondents

The background data collected from the respondents revealed that most them 893(95.9%) were married, whereas 38 (4.1%) of them were single. A total of 167 (17.9%) of the respondents were within the age range of 20-25 years. Regarding age, about thirty percent (279, 29.9%) of them were within the age

range of 26-30 years; 222 were within 31-35 years (23.8%); and 136 were within the age range of 36-40 years (14.6%). Seven percent of the respondents were within the age range of 41-45 years (7.1%); 12(1.3%). A significant proportion of the respondents – 755 (81.1%) – had a child or more, while only 176 (18.9%) were first-timers. The survey showed that 450 of the respondents were Christians (48.3%), 471 were Muslims (50.5%), while only 10 belonged to other religions (1.1%). See Table 2 for more information on the demographic details of the mothers.

**Table 2: Distribution of the mothers by demographic characteristics (N=931)**

S/N	Demographic Variables	Frequency (F)	Percentage (%)
1	Marital Status		
	Single	38	4.1
	Married	893	95.9
2	Religion		
	Christianity	450	48.4
	Islam	471	50.5
	Others	10	1.1
3	Education		
	< School Cert	557	56.9
	SSCE+	374	40.2
5	Income		
	< N20,000	321	34.5
	N20,001 - N50,000	316	33.9
	N50,001 - N100,000	103	11.1
	> N100,000	19	2.0
	No response	172	18.5
6	Age		
	< 20	48	5.2
	20-25	167	17.9
	26-30	279	30.0
	31-35	222	23.8
	36-40	136	14.6
	41-45	66	7.1
	46-50	12	1.3
	>50	1	0.1

### **Types of MCH Information Women Access through ICT**

The study sought to establish the types of MCH information women accessed using ICT. The responses from the respondents in the affirmative indicated appointment reminders (45%) as the most

common type of MCH information mothers obtain using ICT. This was followed by emotional changes in pregnancy (39.5%), with the least accessed being other types (2.1%) of MCH information, such as exercise in pregnancy and growth of the foetus. See Table 3 for more information.

**Table 3: Types of MCH information women accessed through ICT from health workers (N=931)**

Type of MCH information	Ondo	Kaduna	Imo	Gombe	Total F %
Nutrition during pregnancy	223	29	19	34	305 (32.8%)
Appointment reminders	266	45	42	66	419 (45.0%)
Family planning methods	217	45	18	37	317 (34.0%)
Disease prevention in pregnancy	200	35	15	22	272 (29.2%)
Breast feeding	177	35	11	19	242 (26.0%)
Medication in pregnancy	182	49	22	32	285 (30.6%)
Mental health and emotional changes in pregnancy	252	63	20	33	368 (39.5%)
Others (growth of the foetus, exercise)	2	7	5	6	20 (2.1%)

Table 4 presents a breakdown of the different formats of MCH information women received when accessing MCH information from health workers involved in the e-health projects. As shown by the

results in Table 4, more than three quarters of the respondents (642) received MCH information in the voice format. The result revealed the voice format as the most popular.

**Table 4: The format of MCH information mothers received by state (N= 931)**

Format of MCH information	Ondo	Kaduna	Imo	Gombe	Total F %
Voice	283	69	122	168	642 (69%)
Picture	80	60	91	199	430 (46.2%)
Text	4	3	5	1	13 (1.4%)
Others (Songs and video, etc.)	154	11	47	59	271 (29.1%)

### ICT Used by Women for Accessing MCH Information

Table 5 shows various ICT channels used by Nigerian mothers to access MCH information from health workers. A significant proportion of the respondents accessed MCH information provided by health workers involved in the e-health project

using mobile phone –708 (76.0 %). This was followed by radio 623 (66.9%) and TV 513(55.1%), as some of the e-health projects also had supporting interactive programmes on radio and television. ICT tools, such as laptops, public address system and projector-22 (2.5%), were also used for health talks during antenatal/postnatal clinics.

**Table 5: ICT used by women in accessing MCH information by state**

ICT	Ondo	Kaduna	Imo	Gombe	Total	
					F	%
Mobile Phones	302	82	109	215	708	(76.0%)
DVD/TV	169	49	117	178	513	(55.1%)
Radio	220	80	111	212	623	(66.9%)
The Internet/Computer	79	26	43	106	254	(27.3%)
Others (Projector and Public Address System)	4	7	6	5	22	(2.5%)

To substantiate the results obtained from the questionnaire, focused group discussion (FGD) was also organised for 30 women (10 in Ondo State, 8 in Imo State, and 6 each in Kaduna and Gombe States) in the four states. The results obtained from the questionnaire confirmed the findings from the focus group discussions (FGD) conducted in the four states. Mothers who participated in the FGD sessions in the four states confirmed that they accessed MCH information from health workers using mobile phones.

In Ondo State, a nursing mother involved in the *Abiye* Project described the use of phone thus:

*We were given phones, drugs and delivery kits when we registered so we can call the clinic when we need to talk to Mama (matron) or a health ranger (community health workers) about our health. The health ranger or Mama (matron) also calls to give us information and find out about our health.*

In Gombe State, a respondent said:

*My first impression when we were given the phone was good. Many of us could not operate the phone, but we were later taught how to use it. I use it to call the nurse at the health centre. They can call or sometimes send information to us to come for immunization or check-up.*

Another respondent in Imo State also disclosed that:

*With the phone, we can now access information on how to take care of ourselves during pregnancy, from the Internet, even when we cannot get to the hospital.*

In Kaduna State, a nursing mother stated thus:

*I usually make phone calls to the nurse at the health facility to find out when the next injection for my baby will be available. This is because the vaccines are not always available at the health facility.*

Although findings from the FGD organised for mothers confirmed the popularity of mobile phones for accessing MCH information from health workers in the four states, mothers in Gombe and Ondo States also mentioned the frequent use of other ICT channels such as television and radio frequently, when accessing MCH information. A mother, during the FGD session in Ondo State, confirmed that she also accessed MCH information using radio, as some of the e-health projects also had supporting programmes involving health workers on radio and television:

*I receive more information from the radio. I am a trader and I always put on my small radio when I'm in the shop. I always listen to the radio*

*programme ‘Mother and Child’. I like the programme.*

Another mother in Gombe State asserted that:

*I still use the television and radio a lot because I get more information and pictures. The information the matron gives during the clinic is not sufficient. When I call the nurse at the centre, we only talk for a short time because of airtime and sometimes nobody picks the call.*

*I get all the information I look for on the internet. I use the internet every day and I enjoy keeping up with tips concerning pregnancy and child care. I use this source for information that suits my immediate condition such as, why I see droplets of blood, how I can remain healthy, and how I should care for my unborn child. Sometimes, I try to find out how to determine the sex of my baby.*

As regards the use of the Internet, a woman in Imo State stated that:

**Actions Taken after Accessing MCH Information through ICT**

**Table 6: Mothers’ responses on actions taken after accessing MCH from health workers using ICT channel (N = 931)**

<b>Format</b>	<b>No F (%)</b>	<b>Yes F (%)</b>	<b>Ranking</b>
Visited the clinic I’m registered for health care	158(17%)	773(83%)	1
Visited traditional birth attendant	859(92.3%)	72(7.7%)	2
Self-medication/patient medicine vendor	862(92.6%)	69(7.4%)	3
Confided in friends or family members	863(92.7%)	69(7.3%)	4
Did not do anything	880(94.5%)	51(5.5%)	5

Table 6 presents responses on actions taken after accessing MCH from health workers through ICT. While a significant proportion claimed that they visited the clinic where they were registered for health care (83%), 7.7% reported visiting traditional birth attendant (7.7%) and only 5.5% did not do anything after accessing MCH information from ICT channels.

The result in Table 5 does not align with some of the views expressed by the respondents during the focus group discussion (FGD) sessions. Responses from some of the respondents indicated

that the use of ICT for accessing MCH information can result in low utilisation of health facilities; some of them reported not attending antenatal clinics because the use of ICT provides the opportunity to access MCH information without moving an inch.

A major challenge encountered by mothers when accessing MCH information through ICT channels was unreliable power supply (596, 64%). This was followed by poor network coverage (416, 44.7%) and low income (178, 19.1%). Details of the findings are presented in Table 7.

## Challenges Encountered when Accessing MCH Information through ICT

**Table 7: Challenges encountered by mothers when accessing MCH information through ICT**

Challenges encountered	No F (%)	Yes F (%)	Ranking
Epileptic power supply	335(36.0%)	596 (64.0%)	1
My IT skill is low; I can't operate some of them.	830(89.2%)	101 (10.8%)	5
My income is low; I can't afford them	753(80.9%)	178 (19.1%)	3
Poor mobile phone network	515(55.3%)	416 (44.7%)	2
Language of content	805(86.5%)	126 (13.5%)	4
My husband does not support using such channels	853(91.6%)	78 (8.4%)	6
Others (unstable Internet connection, low bandwidth)	911(97.9%)	20 (2.1%)	7

The results from the focus group discussion sessions also confirmed unstable power supply as the most common problem mothers usually encounter when receiving MCH information from ICT channels. This challenge was mentioned by all the respondents during the FGDs in the four states.

## Discussion

The mothers that participated in this study were from different ethnic and religious groups in Nigeria. They were within the age range of 26-40 years, which is within the median age range for mothers reported by the Nigeria Demographic and Health Survey (NDHS, 2008). Within this age range, a significant proportion of women are actively involved in reproduction. This is consistent with the World Development Indicators (World Bank, 2008) that women within the age range are at the peak of their reproductive years. By implication, women within this age category utilise antenatal services more than the other age groups.

The respondents (mothers) accessed a range of MCH information from health workers involved in the e-health projects through ICT. The information included appointment reminders, information on emotional changes, family planning, nutrition and medication in pregnancy, disease prevention, breastfeeding and consultations during emergencies

(See Table 3). However, appointment reminder was the most common type of MCH information accessed by the respondents through ICT. This corroborates the findings of Evans, Abram, Poropatch, Nielsen, and Wallace (2012) in a study in the United States and the Motech Project in Ghana, where ICT was mostly used to confirm appointments for antenatal and postnatal visits by mothers (Grameen Foundation, 2011).

The MCH information accessed by mothers through ICT was in different formats, such as voice, text, picture and video. The voice format was the most used. This is in tandem with results from other studies conducted in other African countries which showed that mothers accessed MCH information in all the formats reported, with the voice format being the most popular (InterMedia, 2010; Cooper, 2013). This result implies that mothers probably prefer accessing MCH information in the voice format.

The findings revealed high prevalence (708, 76.0%) of the use of mobile phones by mothers to access MCH information from health workers involved in e-health projects in the four states (See Table 3). This report was confirmed by similar studies conducted in Nigeria where mobile phone was used for communicating MCH information (Castle, E., Thompson, A. and Karlyn, A. 2011; Onoriode, Otunomeruke, Ofuogbu, Mohammed, and Anyanti, 2012). The results obtained in the study revealed that

the mobile phone was commonly used probably because it reduces the barrier usually encountered by pregnant women as a result of distance (Innovations, 2012). Hence, this study finding has, in a way, identified the mobile phone as an important ICT tool for communicating vital health information when implementing e-health projects.

The data presented in Table 6 on the usual health practice after accessing MCH information through ICT indicated an increase in the utilisation of health facilities by the respondents after accessing MCH information from ICT channels. However, the respondents' views during the FGD sessions indicated a contrary result, as some mothers reported that they avoided visiting health facilities once they could access the needed MCH information through ICT. This implies that the use of ICT as a channel for communicating MCH information could influence the health practices (regular antenatal/postnatal visits) of Nigerian mothers, either positively or negatively; mothers may become complacent about the use of health facilities once they are able to access the required health information through ICT channels. This indicates a need for a proper regulation of ICT to ensure effectiveness.

The respondents identified some of the constraints inhibiting the use of ICT by Nigerian mothers to access MCH information. A major issue raised by the respondents was the problem of unreliable power supply, which is a major problem encountered in developing countries (Corker, 2010; Innovation, 2012; Cooper, 2013). The respondents also complained of missing television programmes as a result of power failure. The result is in consonance with what was presented in similar studies in some African countries, such as Gambia, Congo, Malawi, and Kenya (Cole-Ceesay et. al. 2010; Corker, 2010; Innovation, 2012; Cooper, 2013.). This presupposes that, if power supply continues to pose a serious challenge to the use of ICT for MCH care, it is important that implementers of e-health project provide alternative power sources, such as portable power banks (for mothers), solar systems and inverters (for the health facilities), to ensure effective use of ICT for health promotion. Another constraint identified by the study participants (44.7%) was the poor mobile phone network, which has been linked to poor ICT infrastructure. This problem was also reported in an e-health project in Sierra Leone,

where poor network coverage by mobile phone services providers was identified as a major challenge affecting the use of ICT by health workers and the mothers (Valliere, McAuliffe, Palmer, Maggity, Bangura, 2013).

In addition, some of the respondents with low income 178 (19.1%) mentioned cost as an issue, except in states or projects where the cost was largely subsidised by the government. This finding concurs with a previous study by Kaba, N'Da, and Mbarika(2008), where cost was identified as a major determinant of the use of ICT for accessing health information. It was only in Ondo State (*Abiye Project*) that the cost of using ICT was borne through a public-private arrangement. In the other states, after phones were given (free of charge to mothers), other evolving costs were sometimes borne by the mothers and health workers. To ensure effective use of ICT for receiving MCH information, it is important that an implementation model (maybe a public-private partnership model) that will alleviate the cost burden associated with the use of ICT channels be adapted to encourage the use of ICT platforms. Schweitzer and Synowiec (2012) in their study on the economics of e-health and m-health across the globe stressed the need to come up with a model that can absolve the costs of e-health at different levels of health delivery systems to encourage more investment in e-health and the use of ICT for health care. Otherwise, stakeholders may not totally embrace the use of ICT for MCH care.

## Conclusion and Recommendations

Women are increasingly turning to ICT channels to access MCH information, in spite of the challenges associated with its use. The study indicated that the use of ICT by women in accessing MCH information could influence the health practices (regular antenatal/postnatal visits) of Nigerian mothers, either positively or negatively. Based on these findings, the following recommendations are made:

- Governments and other stakeholders involved in the promotion of MCH should ensure proper positioning and regulation of the use of ICT for health promotion for maternal and child health in Nigeria.
- Policies should target regulating the use of ICT to promote safe MCH practices by ensuring

that ICT-based projects for MCH meet the information needs of mothers at every stage along the continuum of care.

- Health policies should also target subsidising the costs associated with the use of ICT by women of reproductive age to increase their access to relevant maternal health information.
- Alternative power sources, such as portable power banks (for mothers), solar systems and inverters (for the health facilities), should be provided to ensure effective use of ICT for health promotion.
- More investment by governments and the private sector is needed for packaging health tips and MCH information content into acceptable products or formats (CDs/DVDs) that can easily be accessed by women.

To achieve these, further research is also required to assess the contents, as well as mothers' perception of information accessed from ICT. This is to ensure the effectiveness of the use of ICT for promoting safe MCH practices and to maximise its gains in improving maternal and child health outcomes in Nigeria. Therefore, to improve women's access to vital health information as well as the adoption of safe MCH practices, it is pertinent to scale up the use of ICT (mobile phones) for health promotion campaigns for maternal and child health in Nigeria.

### Acknowledgements

This research was partly funded by a fellowship award provided by the Consortium for Advanced Research Training in Africa (CARTA). CARTA has been funded by the Wellcome Trust (UK) (Grant No.: 087547/Z/08/Z), the Department for International Development (DfID) under the Development Partnerships in Higher Education (Del-PHE), the Carnegie Corporation of New York (Grant No.: B 8606), the Ford Foundation (Grant No: 1100–0399), Google.org (Grant No: 191994) Sida (Grant No.: 54100029), and the Bill and Melinda Gates Foundation (Grant No.: 51228).

### References

- Adamu, H. S. (2011). Utilization of Maternal Health Care Services in Nigeria: An Analysis of Regional Differences in the Patterns and Determinants of Maternal Health Care Use (Master of Public Health Masters), University of Liverpool. Retrieved 17 May 2013 from [http://success.ohcampus.com/files/pdfs/mph/mph\\_Quantitative\\_Dissertation\\_1.Pdf](http://success.ohcampus.com/files/pdfs/mph/mph_Quantitative_Dissertation_1.Pdf) (1-2)
- Balogun, M. R., Sekoni, A. O., Okafor, I. P., Odukoya, O. O., Ezeiru, S. S., Ogunnowo, B. E., and Campbell, P. C. (2012). Access to Information Technology and Willingness to Receive Text Message Reminders for Childhood Immunisation among Mothers Attending a Tertiary Facility in Lagos, Nigeria. *South African Journal of Child Health*, 6(3), 76-80. Doi: 10.7196/Sajch.439
- Berg, M., Wairiero, J. and Modi, V. (2009). *Every Child Counts- The Use of SMS in Kenya to Support the Community Based Management of Acute Malnutrition and Malaria in Children under Five. Kenya: Millenium Village Project*. Retrieved, 21, Aug., 2013 from <Http://Www.Cmamforum.Org/Resource/305>
- Castle, E., Thompson, A. and Karlyn, A. 2011. *The Use of Cellphone Technologies for Community-Based Surveillance* : Retrieved July 5, 2013 From [http://static1.squarespace.com/static/5583daf9e4b088692d5320ec/t/55b9f826e4b00242632bcf77/1438251046518/mcbs\\_highlight\\_web.pdf](http://static1.squarespace.com/static/5583daf9e4b088692d5320ec/t/55b9f826e4b00242632bcf77/1438251046518/mcbs_highlight_web.pdf)
- Chandran, U., Thesenvitz, J. and Hershfield, L. (2004). Changing Behaviours: A Practical Framework. Retrieved May2, 2013 <http://www.thcu.ca/infoandresources/publications/changing%20behavioursv4.2.june.15.04.pdf>
- Cole-Ceesay, R., Cherian, M., Sonko, A., Shivute, N., Cham, M., Davis, M., Fatty, F., Wieteska, S., Baro, M., Watson, D., Phillips, B., Macdonald, R., Hayden, B., and Southall, D. (2010). Strengthening the Emergency Healthcare System for Mothers and Children in the Gambia. *Reproductive Health*, 7. 21. Retrieved 16 February, 2013 from <Https://Www.Ncbi.Nlm.Nih.Gov/Pubmed/20718979>



- Cooke, J. G., and Tahir, F. (2013). Maternal Health in Nigeria with Leadership, Progress is Possible.: CSIS Global Health Policy. Retrieved 7 June, 2013, from [http://csis.org/files/publication/130111\\_cooke\\_maternalhealth\\_nigeria\\_web.pdf](http://csis.org/files/publication/130111_cooke_maternalhealth_nigeria_web.pdf)
- Cooper, E. (2013). Evaluating Social Impact of Our Work- CCPF Malawi. Retrieved 25 July, 2013 from <http://www.villagereach.org/impact/ccpf/>
- Corker, J. (2010). "Ligne Verte" Toll-Free Hotline: Using Cell Phones to Increase Access to Family Planning Information in the Democratic Republic of Congo: Cases in Public Health Communication and Marketing, Publication No. IV. Retrieved 20 June, 2013. from [www.casesjournal.org](http://www.casesjournal.org).
- Dalton, J. A., Rodger, D. L., Wilmore, M., Skuse, A. J., Humphreys, S., Flabouris, M., and Clifton, V. L. (2014). "Who's Afraid?" Attitudes of Midwives to the Use of Information and Communication Technologies (ICTs) for Delivery of Pregnancy-Related Health Information. *Women Birth*, 27, 168-173.
- Diaz, J. A., Griffith, R. A., Ng, J. J., Reinert, S. E., Friedmann, P. D., and Moulton, A. W. (2002). Patients' Use of the Internet for Medical Information. *J Gen Intern Med*, 17: 180-185.
- Doctor, H. V., Bairagi R, Findley, S. E., Helleringer, S. and Dahiru, T. 2011. Northern Nigeria Maternal, Newborn and Child Health Programme: Selected Analyses from Population-Based Baseline Survey. *The Open Demography Journal* 4 :11-21 11
- Ezema, Ifeanyi (2016) Reproductive Health Information and Access among Rural Women in Nigeria: A Study of Nsukka Zone in Enugu State. *African Journal of Information and Communication*. Issue 18. Retrieved 27 February, 2017 from <http://wiredspace.wits.ac.za/handle/10539/21788>
- Evans, W. D., Abram, L. C., Poropatch, P., Nielsen, P. E., and Wallace, J. L. (2012). Mobile Health Evaluation Methods: The Text4baby Case Study. *Journal of Health Communication*, 17(Sup1): 22-29. Doi: 10.1080/10810730.2011.649157
- Fajembola, T. (2011). ABIYE: Safe Motherhood: A Case of Leadership in Turning the Tide of Maternal Mortality in Nigeria. *Nigerian Health Journal* . Retrieved 13 July, 2012 from <http://nigerianhealthjournal.com/?p=1526>
- Familusi, E. B. and Owoeye, P. O. (2014). An Assessment of the Use of Radio and other Means of Information Dissemination by the Residents of Ado- Ekiti, Ekiti-State, Nigeria. *Library Philosophy and Practice (E-Journal)*, Paper 1088: 1-29. Retrieved 27 February, 2017.
- Federal Ministry of Health Nigeria. (2011). *Saving Newborn Lives in Nigeria: New Born in the Context of the Integrated Maternal, New-Born and Child Health Strategy* (2nd Edition Ed.). Abuja: Federal Ministry of Health, Save the Children, Jhpiego; 2011.
- Ferraz, M., Almeida, A. M., and Matias, A. (2013). The Influence of the Web on the Decision-Making Process During the Pregnancy-Puerperal Cycle: Literature Review and Proposal for A Research Project. *The International Journal of Communication and Health.*, 1: 60-65.
- Gao, L., Larsson, M., and Luo, S. Y. (2012). Internet Use by Chinese Women Seeking Pregnancy-Related Information. *Midwifery* 2012., 29(7): 730-735.
- Grameen Foundation (2011). Mobile Technology For Community Health in Ghana (Pp. 30-85). Retrieved 3 April 2012, From <http://www.grameenfoundation.org/sites/grameenfoundation.org/files/motech-lessons-learned-sept-2012.pdf>
- Innovations For MNCH. 2012. Bridging Women and Children to Better Health Care: Maternal, New-Born and Child Health Access through Mobile Technology in Balaka District, Malawi. Retrieved 3 April 2013, from [http://innovationsformnch.org/uploads/publications/2012-01\\_final\\_project\\_brief\\_-\\_ict\\_for\\_mnch.pdf](http://innovationsformnch.org/uploads/publications/2012-01_final_project_brief_-_ict_for_mnch.pdf)
- Intermedia. (2010). Case Study: Maternal and Infant Health Programs for Young Rural Women. *Audiencescapes National Survey of Ghana*. Retrieved 10, Oct. 2013 from <http://www.audiencescapes.org/country-profiles-ghana-communication-and-development-health->

- case-study-young-rural-women-case-study-infant%20care-maternity
- Joshi, S. (2012). Reproductive Health and Economic Development: What Connections should we Focus on? *Research Brief*, 3. Retrieve 20 January, 2013 from <http://www.prb.org/pdf12/poppov-economic-development-reproductivehealth-women.pdf>
- Jossefson, U., and Hanseth, O. (2000). Patient's Use of Medical Information on the Internet: Opportunities and Challenges. Some Preliminary Findings. Paper Presented at the IRIS 23. Laboratorium for Interaction Technology, University of Trollhättan Uddevalla, 2000 University of Trollhättan.
- Kaba, B., N'Da, K., and Mbarika, V. (2008). Understanding the Factors Influencing the Attitude Toward and the Use of Mobile Technology in Developing Countries: A Model of Cellular Phone Use in Guinea. Paper Presented at the Proceedings of the 41st Hawaii International Conference on System Sciences.
- Lagan, B., Sinclair, M., and Kernohan, W. (2010). Internet Use in Pregnancy Informs Women's Decision Making: A Web-Based Survey. *Birth*, 37(2): 106-115.
- Musoke, M. G. N. (2002). *Simple ICTs Reduce Maternal Mortality in Rural Uganda: Telemedicine Case Study*. Retrieved Apr. 19, 2013 from <http://www.medicusmundi.ch/mms/services/bulletin/bulletin200202/kap04/16musoke.html>
- NDHS. (2008). Nigerian Demographic and Health Survey 2008. Abuja, Nigeria: National Population Commission and ICF Macro Nigeria: National Population Commission. Retrieved 5 Nov. 2013 from <https://www.datafirst.uct.ac.za/dataportal/index.php/catalog/363>.
- Obasola, O.I. and Mabawonku, I. (2017). Africa. *Maternal* 19(8):1813-24. Retrieved 20 February 2017 from <https://www.ncbi.nlm.nih.gov/pubmed/25652059>.
- Olatokun, W. M. and Adeboyejo, F. C. (2009). Information and Communication Technology Use by Reproductive Health Workers in Nigeria: State of the Art, Issues, and Challenges. *An Interdisciplinary Journal on Humans in ICT Environments*.5 (2): 181-207.
- Onoriode, E., Otunomeruke, A., Ofuogbu, C., Mohammed, A., and Anyanti, J. (2012). The Use of Call Centres in Promoting Access to Health Services among Rural Dwellers: Experiences from a Maternal and Neonatal Health Care Learning Project in Gombe State, Nigeria. Paper Presented at the Second Global Symposium on Health Systems Research. Retrieved 10 January, 2013. <http://hsr2012.abstractsubmit.org/presentations/5474/>
- Oyeyemi, S. O. (2012). The Use of Cell Phone for Maternal Health: The Abiye Project. Retrieved 11, April, 2013 from <http://munin.uit.no/handle/10037/4793>
- Parker, R. M., Dmitrieva, E., Frolov, S. and Gazmararian, J. A. (2012). Text4baby in the United States and Russia: An Opportunity for Understanding How Mchealth Affects Maternal and Child Health. *Journal of Health Communication* 17. Sup1: 30-36.
- Rodger, D., Skuse, A., Wilmore, M., Humphreys, S., Dalton, J., Flabouris, M., and Clifton, V. L. (2013). Pregnant Women's Use of ICT to Access Pregnancy-Related Information in South Australia. *Aust J. Prim Health.*, 19 (4): 308-312.
- Sacks, S., and Abenhaim, H. A. (2013). How Evidence-Based is the Information on the Internet about Nausea and Vomiting of Pregnancy. *J Obstet Gynaecol Can*, 35(8): 697-703.
- Saleh, A. G. and Lasisi, F. I. (2011). Information Needs and Information Seeking Behavior of Rural Women in Borno State, Nigeria. *Library Philosophy and Practice*, Paper 625:1-6. Retrieved 14, April 2014.
- Tashakkori, A. M. and Teddlie C. B. (2010). *Handbook of Mixed Methods in Social and Behavioural Research*. 2<sup>nd</sup> Edition London: Sage.
- USAID. (2001). USAID Congressional Budget Justification FY 2002: Program Performance and

- Prospects. *The Global Health Pillar*. Retrieved 11 Mar. 2013 from [http://pdf.usaid.gov/pdf\\_docs/pdabu802.pdf](http://pdf.usaid.gov/pdf_docs/pdabu802.pdf)
- Valliere, F., Mcauliffe, E., Palmer, I., Maggity, E., Bangura, A. S., (2013). Supporting and Strengthening Maternal Neonatal and Child Health Services Using Mobile Phones in Sierra Leone: A Research Protocol. *Harvard Africa Policy Journal*. Retrieved 20 March 2013
- <http://apj.fas.harvard.edu/supporting-strengthening-maternal-neonatal-and-child-health->
- Victoria, V. and Nicogossian, A. (2011). Mhealth: Saving Lives with Mobile Technology. Retrieved 19 November, 2013. [http://csimpp.gmu.edu/pdfs/student\\_papers/2011/victoria.pdf](http://csimpp.gmu.edu/pdfs/student_papers/2011/victoria.pdf)
- WHO. (2012). WHO Fact Sheet. Retrieved Apr. 20 2013 from <http://www.who.int/mediacentre/factsheets/fs348/en/index.html>
- WHO Jan 2016. *WHO Fact Sheet* No. 178. Retrieved July 2 2016 from <http://www.who.int/mediacentre/factsheets/fs178/en/>
- WHO and UNICEF. (2012). Countdown to 2015: Maternal, New-Born and Child Survival
- WHO, U., UNFPA and the World Bank. (2012). Trends in Maternal Mortality: 1990 to 2010. WHO, UNICEF, UNFPA and the World Bank Estimates (Pp. 22).
- World Bank. (2008). World Indicators. Retrieved 3 June, 2013 from <http://data.worldbank.org/sites/default/files/wdi08.pdf>
- Yamuah, L. K. (2005). *Towards Healthy Nations with ICT Wealth. ICT in the African Health Sector*. Retrieved, Aug. 6, 2013 from [http://www.bihardevelopment.org/catchall.php?link\\_1\\_id=24andwriteuplink\\_level=link\\_2\\_andwriteuplink\\_id=245](http://www.bihardevelopment.org/catchall.php?link_1_id=24andwriteuplink_level=link_2_andwriteuplink_id=245)

**Oluwaseun Obasola** is the System Librarian at E. Latunde Odeku Library, College of Medicine, University of Ibadan, and Oyo State, Nigeria. She holds a Bachelor of Science degree in Computer Science with Economics from the Obafemi Awolowo University, Ile Ife, Osun State, Nigeria; and a Masters in Library, Archival and information Studies from the Library School, University of Ibadan.



# Women's Preference for Folk/Modern Media in Disseminating HIV/AIDS Information in a Selected Rural Community in Oyo State, Nigeria

**Janet Adekannbi**

*Africa Regional Centre for Information Science,  
University of Ibadan, Nigeria*  
[janet.adekannbi@gmail.com](mailto:janet.adekannbi@gmail.com)

*and*

**Kehinde I. Dada**

*ICT Resources Centre,  
Federal University of Agriculture,  
Abeokuta, Nigeria*  
[laskenny@yahoo.co.uk](mailto:laskenny@yahoo.co.uk)

## Abstract

*This study investigated women's preference for folk/modern media in disseminating HIV/AIDS information in a rural community in Nigeria. Survey research design was employed in carrying out the study. A rural community was purposively selected in Oyo State, Nigeria. Snowball sampling technique was employed in selecting seven female key informants while convenience sampling was used to select 30 female respondents between ages 13 – 49 years. Four focus group discussions and seven key informant interviews were conducted. Findings from the study showed that most of the rural women preferred folk media in receiving HIV/AIDS information while few preferred the modern media. All the rural women reported one behaviour change or the other which included: abstinence, the use of condom during sexual intercourse, and not sharing sharp objects such as blade, syringe and needle. Government policy promoting the use of folk media for disseminating information on HIV/AIDS is recommended to support effort by non-governmental agencies.*

**Keywords:** HIV/AIDS, Women, Modern media, Folk media, Rural community

## Background to the Study

Human Immunodeficiency Virus (HIV) is a virus that targets the immune system and weakens it, making it susceptible to infections and diseases. As the virus destroys and impairs the function of immune cells, infected individuals gradually become immunodeficient. Immunodeficiency results in increased susceptibility to a wide range of infections and diseases that people with healthy immune systems can fight off. The most advanced stage of HIV infection is Acquired Immunodeficiency Syndrome (AIDS) (WHO, 2014). The term HIV/AIDS represents the entire range of diseases caused by the human immunodeficiency virus from early infection to late stage symptoms (Mgcini, 2008).

HIV/AIDS pandemic continues to pose a serious danger to the population of Sub-Saharan Africa, despite ongoing public health efforts by the government and non-governmental organisations to control the spread of the infection. In 2013, an estimated 35 million people globally were living with HIV/AIDS; 2.1 million people became newly infected with HIV and 1.5 million people died from AIDS-related illnesses (WHO, 2014). Sub-Saharan Africa has the highest rate of infection of HIV/AIDS among adults and children in the world. Approximately 70% of the people living with HIV/AIDS reside in Sub-Saharan Africa. Adolescent girls and young women account for one in four new HIV infections. (UNAIDS Gap Report on the Global AIDS Epidemic, 2014). According to UNICEF (2013), Nigeria has the second highest HIV burden in the world. The prevalence is 3.6 per cent among the general

population. Education is the only vaccine against AIDS in the early years of its control (Obono, 2011). Also, education and information were identified core components of the national AIDS programme, to be achieved through media output (Odotolu et. al. 2006).

According to Nwagwu (2008), information is power and has been recognised worldwide as being effective in changing behaviour and attitude essential in health situations such as HIV/AIDS where there is no known cure. The future trend of the HIV/AIDS pandemic to a large extent depends on the level of HIV/AIDS awareness and the knowledge possessed by the people. The media plays a vital role in HIV/AIDS awareness, educating and improving knowledge about how to combat the spread of the disease (Obono, 2011). Media is divided into two broad groups, namely, the modern or mass media and the traditional or folk media.

Aikat (2009) defined modern media as mass communication characteristic of recent times, or the contemporary communication relating to a recently developed or advanced technology, examples include television, radio, internet, mobile phones, VCDs/DVDs, billboards and handbill. This type of media are in a position to create greater public awareness of HIV and AIDS, which is necessary before individuals critically look at the challenges posed by the epidemic to be able to make informed decisions to help prevent infections, protect themselves, and ensure proper care and treatment. Also, news coverage through the modern media can reinforce information that people receive about the epidemic from other sources.

Folk media communication systems refer to all organised processes of production and exchange of information managed by rural communities. These include traditional theatre or drama, masks and puppet performances, tales, proverbs, riddles and songs (Daudu, 2009). According to Chiovoloni (1994), they are cultural and endogenous responses to different community needs for information, education, social protest and entertainment. The folk media has been known to be a communication vehicle for promoting and improving dialogue which the common people employ to deliver their messages (Zwaal, 2003), and it is always related to the people's past, present and future providing them with a

glimpse of reality that results in education and learning (Daudu, 2009). It is an interactive and participatory traditional communication medium, which ensures that rural people engage in dialogue. Studies have been conducted to show the preference of people for any of the two major media types.

In a study conducted in Fuzhou, China, 3,716 market workers participated in the face-to-face survey; it was found that multiple sources of HIV information where at least one source of mass medium was significantly related to HIV knowledge, less stigmatising attitude towards people living with HIV/AIDS (PLWHA) (Li et al, 2009). The authors reported that the television appeared to be the most cost-effective medium and yields the strongest impact in terms of HIV/AIDS awareness, transmission of knowledge, interpersonal communication and behavioural change, as opposed to campaigns using other channels, such as radio or print media because television broadcasts reached the majority of the population (Li et al, 2009). In an earlier study carried out by Nwagwu (2008) in a rural community in Imo State, Nigeria, on effectiveness of sources of HIV/AIDS awareness, the author considered 14 different sources of HIV/AIDS awareness available to women and adolescent girls dwelling in the community. The study reported that all the 434 women and 734 girls surveyed expressed awareness about HIV/AIDS. The percentage of awareness of AIDS by sources among the respondents however differed, as 35.0% of the women reported that they heard of AIDS from radio; 24.1% from television; 17.8% from friends and relatives, while 55.0%, 44.2% and 23.0% of the girls heard of AIDS from television, radio, friends and relatives respectively. It was concluded that although radio, television and friends and relatives constitute a great source of information about AIDS to the people, each of these sources served the various groups differently, even though they lived in the same community.

In a study carried out in Makurdi Local Government Area of Benue State, Nigeria, farmers showed a positive attitude towards obtaining HIV/AIDS information through the radio. Radio programmes packaged in Pidgin English or local language enhanced farmers' interest, listenership and positive change in behaviour (Oboh and Sani, 2009).

Obono (2011) also confirmed that radio campaigns have been successful in increasing HIV knowledge and changing behaviour. However, in a study among young people in developing countries, Bertrand and Anhang (2006) noted that while mass media interventions are effective in increasing knowledge of HIV transmission, improving self-efficacy in condom use, influencing some social norms, increasing the amount of interpersonal communication, increasing condom use and boosting awareness of health providers, the effect is not significant in improving self-efficacy in terms of abstinence, delaying the age of first sexual experience or decreasing the number of sexual partners. Folk media have however been recognised as an important tool and a new innovation to disseminate messages on HIV/AIDS mainly in rural and media dark areas (Panford et al, 2001). Singhal et. al. (2007), in an action-based folk media campaign and research project on HIV/AIDS in rural Bihar India, found that rural audiences in Bihar greatly appreciated the use of folk media interventions to promote messages about HIV/AIDS prevention, care and support. Those who attended the display easily recalled the names of characters in the folk drama, as well as the key educational messages conveyed through the folk media performances. Importantly, audience and community members widely shared and discussed what they learned from the folk performances with peers, family, and community members.

According to Wenje et al (2011), there could be a mismatch between the media used to disseminate HIV/AIDS information on one hand and the target audience on the other. In their study among the Luo of Western Kenya, it was reported that despite massive print, radio and television campaigns on HIV/AIDS, behavioural change was not really observed among the respondents. Behavioural change can only occur if the audience is able to process the information offered within its cultural context. Respondents who received the same information through the folk media responded to the call overwhelmingly. The power of folk media in changing behaviours in rural Africa results largely from the media's originality and the audience's belief and trust in the sources of the messages, which often come from people real to their audiences (Panford et. al. 2001). Also, folk media address local interests

and concerns in the language and idioms that the audience is familiar with and understands, they are appropriate communication channels for populations in rural areas.

Hence, on its own merit, education may not bring about intended behavioural change if teaching methods are not made appealing and relevant to receivers (Obono, 2011). Moreover, Obono (2011) noted that "little is thus known or documented about context and culture-specific media strategies utilised for easy availability, affordability, accessibility and comprehension of HIV messages in a pluralistic country like Nigeria." (Obono, 2011, p. 148). This study thus seeks to investigate the preference of women for the use of folk and modern media in disseminating HIV/AIDS information in a selected rural area of Oyo State, Nigeria.

The study would provide answers to the following research questions:

1. What is the level of awareness about HIV/AIDS in the selected community?
2. What are the types of media used for HIV/AIDS awareness in the selected community?
3. What behavioural changes have rural women implemented after obtaining the HIV/AIDS information?
4. Do rural women prefer folk/modern media to disseminate HIV/AIDS information in the selected rural community?
5. What are the problems encountered in using folk/modern media for HIV/AIDS awareness in the selected rural community.

## Research Methodology

Survey research design method was employed in carrying out the study. Qualitative research method was used due to the need for an in-depth understanding of the reasons that govern the rural women's preferences. The location of this study is Akufo village in Ido Local Government Area (LGA) of Oyo State, Nigeria. Akufo is a small village with population less than 1,500 people. The basic occupation of the people is farming. They grow varieties of cash crops such as cassava, kola nut, palm oil, timber, and food crops such as maize and

rice. The village is headed by a village head called Baale of Akufo (Interview with women leader, 18th February, 2015). The study population consisted of mainly females in their reproductive age. Reproductive age group refers to the active reproductive years in women, starting with menarche around 12-14 years and ending with menopause around 45-49 years (Health System Fact Sheet, 2003).

The multi - stage sampling technique was used for the study. The first stage involved purposive selection of one senatorial district from the three senatorial districts in Oyo State. Oyo South senatorial district was selected. At the second stage, one local government was purposively selected from Oyo South senatorial district. Ido Local Government was selected and Akufo village was selected in the third stage of the sampling. These selections were based on recommendation by a non-governmental organization, Dorcas Foundation, which trains volunteers on dissemination of HIV/AIDS information. Snowball technique was applied in selecting the women leaders that participated in the study, as each leader referred the researcher to another leader. Convenience sampling was however used in selecting 30 female respondents. In all, 7 women leaders and 30 other female respondents participated in the study.

### **Data Collection and Analysis**

Focus group discussions (FGD) and interviews were used in data collection. Qualitative data was collected through the FGD from 30 women from

age group 13-49 years. Four FGD sessions were held with the women divided into the following age groups: 13-19 years, 20-29 years, 30-39 years, and 40-49 years. Each group was made up of 7 members. Seven in-depth interviews were held with the women leaders. Both the interview schedule and FGD guide contained questions on demographic variables of the respondents, respondents' knowledge of HIV/AIDS and media used to access HIV/AIDS information, preference for the use of modern/folk media to obtain HIV/AIDS information, as well as challenges faced in accessing information on HIV/AIDS using the preferred media. The instrument was translated into Yoruba language. Data collected from the focus group discussions and interviews were transcribed and analysed thematically. The data were transcribed into texts, and the transcribed texts were searched to identify recurrent themes conveying similar meanings. Such recurrent themes were illustrated with some quotations from the original text in order to communicate their meanings better.

## **Results**

### **Demographic Characteristics of Respondents**

Table 1 shows the demographic characteristics of the respondents. Across the age groups, most of the respondents were Muslims except in age group 40-49 years. The frequency distribution also showed that all the respondents in age group 13-19 years were single, whereas all respondents between 40-49 years were married. None of the respondents were divorced or widowed. As might be expected, the highest level of education for respondents between 13-19 years was secondary education and all these respondents were students.

**Table 1: Demographic Characteristics of the Respondents N=30**

Characteristics	Age Group (Years)			
	13-19	20-29	30-39	40-49
Religion				
Christianity	28.6	14.3	28.6	55.6
Islam	71.4	85.7	71.4	44.4
Marital status				
Single	100.0	14.3	14.3	–
Married	–	85.7	85.7	100.0
Educational level				
No formal education	–	14.3	57.1	11.1
Primary	–	28.6	28.6	22.2
Secondary	100.0	57.1	14.3	66.7
Occupation				
Farming	–	–	28.6	22.2
Hairdressing	–	14.3	14.3	11.2
Student	100.0	–	–	–
Tailoring	–	–	–	33.3
Trading	–	85.7	57.1	33.3

### Level of Awareness about HIV/AIDS in the Selected Communities

Generally, all the respondents had some knowledge of HIV/AIDS. Majority expressed their knowledge about the virus as shown from the following responses:

“It is an organism in the blood” (FGD participant, 13-19 and 20-29 years).

“It is a microscopic organism that cannot be seen with the naked eyes” (FGD participant, 20-29 years).

Respondents also expressed their views about how the virus can be transmitted. It was observed that most of the respondents reported sexual intercourse as a means of transmission. Only one respondent mentioned mother-to-child transmission, whereas no respondent mentioned that it can be transmitted through blood transfusion.

“It can be transmitted through sexual intercourse between a man and a woman if one of them is infected with HIV/

AIDS, through the use of toothbrush that belongs to HIV/AIDS patient, if syringe used for HIV/AIDS patient is used for someone that does not have it, from an infected pregnant woman to the unborn baby, by sharing blade and salon kit with an infected person.” (FGD participant, 20-29 years).

However, few respondents had a wrong view of how HIV/AIDS can be transmitted. Such wrong views expressed included eating with infected person, not covering food properly, dirty clothings, preparing food close to the toilet, breathing on each other, and urinating where an infected person have urinated.

“By eating with an infected person, by failing to wash your clothes and eating rotten food, if food is prepared very close to the toilet and wind blows germs on it” (FGD participant, 30-39 years).

“If a person isn't clean enough to keep food from different houseflies one could



easily have a blood disease which can lead to HIV/AIDS” (FGD participant, 20-29 years).

“If you urinate where the person that has it has just urinated, you can contact the disease” (FGD participant, 40-49 years).

To some extent, all the respondents were able to explain how HIV/AIDS can be prevented. They reported that the infection can be prevented through abstinence, use of condom, and using new syringes.

“We should ensure that the syringe used to inject us is new, we should also avoid using blade that belongs to someone else and we should use condom during sexual intercourse” (FGD participant, 13-19 years).

“Ah! Your question is a bit difficult, but I will try, for someone to be able to prevent HIV/AIDS, it starts with constant checkup of blood in the hospital, whether he or she is infected or not. One should also be careful of taking a bad step, especially married women who go around messing themselves up” (FGD participant, 20-29 years).

“You should not allow the nurses to inject you with a used syringe. Pregnant women should also buy hand gloves for use in the hospital, we should have enough at home so that we can make use of them anytime. Women who always cut their hair with blade should always buy a new blade. Going to hospital for blood check-up isn't ruled out as well, because if one's blood is infected we would know how to take good care of the body and if not infected we will be extremely careful so as to avoid being infected” (FGD participant, 30-39 years).

Generally, women in Akufo village had a high level of awareness about HIV/AIDS. This finding contradicts previous studies by Alike (2013) and Ornsaye and Oviasogie (2014) which reported low

level of awareness of HIV/AIDS among rural dwellers in Edo State, Nigeria. In each study, only 40% of the respondents were aware of HIV/AIDS. However, in a study carried out among rural farmers in Benue State, Nigeria, Oboh and Tsue (2010) reported that over 90 percent of respondents were aware of HIV/AIDS. A similar finding was reported by Etukumana, Thacher and Sagay (2011) among rural pregnant women in northern Nigeria. The high awareness level observed among women in Akufo village might not be unconnected with the activity of a non-governmental organization (NGO) in the community. This NGO organises different programmes aimed at providing useful information on HIV/AIDS to the dwellers to complement the efforts by the government. The observed wrong perception by few of the respondents on the causes of HIV/AIDS was also observed by Oboh and Tsue (2010). The authors reported that despite the high level of awareness about HIV/AIDS, a reasonable proportion of the respondents ignorantly attributed its cause to poison (35.6%), witchcraft (32.5%), mosquito bite (27.5%), and eating/bathing/sleeping with infected individuals (20%).

### **Types of Media Used in Receiving Information on HIV/AIDS**

Majority of the respondents got to know about HIV/AIDS through the radio, television, health centres, community meeting and folk drama. All these sources can be classified as modern folk media. Their responses include:

“We heard it from the radio and they acted it in our school” (FGD participant, 13-19 years).

“We came across HIV/AIDS information through advertisement and we also heard it from the television and radio stations. Also, we heard it from people's discussion and from the Health Centre” (FGD participant, 20-29 years).

“We also heard it from the community and they acted a play on it. There are also groups or parties that are established for the sake of HIV/AIDS. There was a

time when the wife of the State Governor explained to us that women are mostly affected by this virus. She then told us to come for check-up so as to know our HIV status and if positive, there is a drug that can be administered at that level" (Key informant, 30-39 years).

"We hear a lot about it in the radio, television, we read it in the newspaper, and they also came to our association to give us lectures on it" (FGD participant, 30-39 years).

"We hear it all over the news on radio and television. They came to lecture us on it, they brought it to our place, at customary court, in form of drama" (FGD participant, 40-49 years).

"The wife of the Governor organised an enlightenment programme on it. I heard it in the local government council, health centre and the chairperson of National Union of Local Government Employees also enlightened us on it" (Key informant, 30-39 years).

Respondents however, reported that they did not receive information on HIV/AIDS regularly.

"They come once in a while. They ought to be coming every day, so that we can know how to prevent HIV/AIDS very well" (FGD participant, 13-19 years).

"They don't usually pass information on HIV/AIDS regularly" (FGD participant, 20-29 years).

"It has been a while I heard anything on HIV/AIDS" (FGD participant, 30-39 years).

Access to information on HIV/AIDS through both modern and folk media as revealed in Akufo community agrees with previous studies such as Nwagwu (2008) and Wenje et al (2011). Nwagwu (2008) reported that women in a rural community in Imo State, Nigeria have heard of HIV/AIDS from

radio (35.0%), television (24.1%) and friends and relatives (17.8%) while for the girls it was 55.0%, 44.2% and 23.0% from television, radio and friends and relatives respectively. Wenje et al (2011) also reported the use of folk media in disseminating HIV/AIDS information among the Luo of Western Kenya.

### **Behavioural Changes Implemented after Obtaining HIV/AIDS Information**

Generally, all the respondents reported implementing some behavioural changes after obtaining information on HIV/AIDS. The women stopped sharing objects such as toothbrush, blade and needle, and made use of condom whenever they wanted to have sexual intercourse. The respondents also reportedly preferred getting new syringes for use and ensuring that the nurses remove the package in their presence. The women leaders also reported serving as change agents in their community, advising girls and women about protected sex.

"Well, we have stopped sharing one another's toothbrush, blade, needle syringe and we now make use of condom whenever we want to have sexual intercourse" (FGD participant, 13-19 years).

"We prefer to get our own syringe and tell them to remove the nylon in front of us. The second thing is that, we make sure we cover our food to show neatness" (FGD participant, 20-29 years).

"It brought a lot of changes in us, when we heard that we should not use blade that belongs to someone else, it makes us to get a new blade". (FGD participant, 30-39 years).

"It changed us in the sense that we make use of condom during sex. Also, we do not use a blade that has already been used by someone else to cut our nails, instead we get a new blade and we are careful in using things like blade, cloths, plates, spoons and cups. One should be clean in everything. Also, if we go to the salon,

we should take along our own wooden stick used for hairdo” (Key informant, 40-49 years).

“I now advise women and my sisters not to go around with men” (Key informant, 30-39 years).

Behavioural change communication moves people from awareness to action driven behaviours (Obono, 2011). Such behavioural change reported in Akufo village is similar to findings by Adeokun et al (2005) in a study among 1,373 women of reproductive age in Ibadan, Nigeria. Majority of the respondents reported sexual behavioural changes, which included restriction of sex partners, use of condoms, sexual abstinence and avoidance of casual sex. Many respondents also took some steps to reduce risk of infection by avoiding transfusion with unscreened blood and testing for HIV status after they were exposed to the HIV/AIDS prevention campaigns.

### **Preference of Women for Folk/Modern Media to Disseminate HIV/AIDS Information**

Findings from this study revealed that majority of the respondents preferred the folk media. Reasons given for their preference included: they could see the communicators face to face; the communicators spent time with them and they understood the message passed across to them; and they could ask questions and have answers. However, in the modern media, they complained that they cannot ask questions and the programme runs for a limited time as each programme on radio has specific time allotted to it.

“We prefer the one that they acted in form of play for us in school because we were able to watch and see how HIV/AIDS is transmitted from one person to another.” (FGD participant, 13-19 years).

“The main reason I prefer the one they did in school is that, they explained it well enough in the play. That of the radio has a time limit as each programme on radio

has allotted time for it, but the one they did for us in school, they fixed a time for us and spent time with us and we understood it very well” (FGD participant, 13-19 years).

“I prefer that of the community. The reason is that one can see the speaker face to face but one can only see the speaker through the television. Also, the community programme is more explanatory and not difficult to understand. In addition, the radio programme is usually for 30 minutes but that of the community they will be here sometimes for 2 hours explaining to us” (FGD participant, 20-29 years).

“It is because we were allowed to ask questions after the play, for clarification on anything we did not understand” (FGD participant, 20-29 years).

“I prefer that of the community because there is a relationship between the actor and the audience. The audience will be many and can also see the actor face to face” (Key informant, 30-39 years).

“I like the folk drama because I always remember it. The acting is very real as if it happened to the actors in real life” (Key informant 30-39 years).

“We prefer the traditional media. Because we can see ourselves, we can ask questions. The main reason why we prefer it is that we both have the opportunity to see ourselves, we can ask any question, we will have a good conversation together, but that of the radio, we do not have the opportunity to do this” (FGD participant, 40-49 years).

Some respondents noted that they were usually given condoms, and infected persons are treated but with the modern media there was no opportunity to receive anything.

“They distributed condoms and this has ensured good health in Ido LGA. They also took care of those that have the disease by giving them drugs. I like this community programme” (Key informant, 30-39 years).

However, few respondents preferred the modern media, especially the radio and television. Reasons given included the fact that more people could be reached through this means and the programmes are handled by mature nurses.

“I love the modern media, television, the reason is that we can hear them talk about the virus and many people can be reached through the television. I also like the radio, they announce to everyone the cause of HIV/AIDS infection” (FGD participant, 20-29 years).

“I prefer the modern media, especially the radio. You know it is impossible for someone who doesn't know about it to get on the radio and start talking about it. Also, those that talk on the radio are mature nurses with experience who give full information” (FGD participant, 20-29 years).

It is not a surprise that most of the women in the community preferred the folk media. According to Panelist (2000), cited in Daudu (2009), drama as a traditional means of information allows different possible endings and encourages audience participation. A similar observation was made by Singhal et. al. (2007), an action-based folk media campaign and research project on HIV/AIDS in rural Bihar, India. The study noted that rural audiences in Bihar greatly appreciated the use of folk media interventions to promote messages about HIV/AIDS prevention, care and support. Moreover, according to Johri et al. (2012), the characteristics of being flexible, interactive, reiterative and the ability to arouse empathy make folk media special and effective.

### **Problems Encountered in Using Modern/Folk Media for HIV/AIDS Awareness**

Some respondents noted that they did not face any challenge in using their preferred media while others expressed some challenges. Some believed that the time used for the modern media campaign is rather inadequate and if there is no light they will not be able to listen to the programme or watch the television.

“The challenge faced is that the time used for the programme on the television and radio station is not enough to give us adequate information on HIV/AIDS, but that of the community, they can use 1 or 2 hours with detailed explanation. Also, if there is no light we will not be able to listen or watch the program” (FGD participant, 20-29 years).

Some respondents reported that although the information increased their knowledge when they brought it to their school, the younger students were exposed to information they were not matured for. Furthermore, they acknowledged that the awareness is good but they should try and separate the adults from the secondary school students during drama presentations in the community. The women believed that the students see the use of the condom as an avenue to indulge in sexual activities. Moreover, when the used condoms are disposed, little children picked them up and use them as balloons, these children can contact the deadly disease out of ignorance.

“It educates us but the younger students are exposed to information they are not matured for. Only mature people should be opportuned to listen or watch the play” (FGD participant, 13-19 years).

“The publicity is alright, but we would prefer that the government should try and separate the adult from the secondary school students when teaching us. The reason is that, these students see it as an opportunity to indulge in sex especially the secondary school students. They should

teach them what they need to know at their level” (FGD participant, 30-39 years).

“The major challenge we face is about these students who mess themselves up, and they carelessly throw away the used condoms. These are the condoms children play with using them as balloons. I have collected condoms from children, these children can contact this deadly virus whenever they blow the condom out of ignorance. Maybe, there should be a programme to teach those that make use of condoms how to dispose it” (FGD participant, 30-39 years)

“As for those that use condoms, they should help us announce that they should dispose their condoms in the toilet and not everywhere” (FGD participant, 30-39 years).

## Conclusion and Recommendation

This study has shown that the rural women in the selected community have high level of awareness about HIV/AIDS, and information is generally received through the radio, television, health centres, community meeting and folk drama. Behavioural changes such as not sharing objects (toothbrush, blade, needle, etc.) and use of condoms for sexual intercourse were reported by the women. Findings from this study have shown that the role of folk media in disseminating HIV/AIDS information cannot be overlooked, especially among the rural population in Nigeria. Most of the rural women in the selected community preferred the folk media as the means for receiving HIV/AIDS information. Folk media were largely preferred because of its interactive nature.

Findings from this study are therefore crucial to various individuals, groups of individuals, donor agencies, non-governmental organisations (NGOs) and government at the three tiers of governance in Nigeria that are trying to reduce the pandemic of HIV/AIDS. Government should especially introduce policies at the national, state and local levels of governance that will ensure that folk media are

integrated into rural communities as a way of disseminating information, especially those on HIV/AIDS.

A major limitation of this study is that it was carried out in a rural community in Oyo State, Nigeria. Information professionals can consider focusing on carrying out similar studies in different parts of the country. These studies would provide a holistic picture of the preferred medium for dissemination of information on HIV/AIDS, especially in the rural communities.

## References

- Adeokun, L.A., Ladipo, O.A., Kanki, P. et. al. (2005). The Role of HIV/AIDS Prevention Campaigns on HIV-Related Behavioural Changes In Ibadan, Nigeria. *African Population Studies*, 20(2) 43-63.
- Aikat, D. (2009). Traditional and Modern Media. *Journalism and Mass Communication*; 1, [Http://Www.Eolss.Net/Sample-Chapters/C04/E6-33-02-04.Pdf](http://www.eolss.net/sample-chapters/C04/E6-33-02-04.pdf) (Accessed 20 November 2014).
- Alika, I.H. (2013). HIV/AIDS Awareness Level of Urban and Rural Adolescents in Edo State, Nigeria: Implication for Counseling. *International Journal of Development and Sustainability*, 2(2) 1224-1233.
- Bertrand, J.T. and Anhang, R. (2006). The Effectiveness of Mass Media in Changing HIV/AIDS- Related Behaviour among Young People in Developing Countries. *World Health Organization Technical Report Series*, 938(205-41) 317-41.
- Chiovoloni, M. (1994). The Interactive Power of Local and Traditional Communication Systems. [Www.Metafro.Be/Leisa/1994/10-1-12.Pdf](http://www.Metafro.Be/Leisa/1994/10-1-12.Pdf) (Accessed 20 February 2015).
- Daudu, S. (2009). Problems and Prospect of Folk Media Usage for Agricultural Extension Service Delivery in Benue State, Nigeria. *Journal of Human Ecology*, 25(1) 19-24.
- Etukumana, E.A., Thacher, T.D. and Sagay, A.S. (2011). HIV/AIDS Awareness among Pregnant Women in a Rural Nigerian Hospital.

- Tropical Journal of Obstetrics and Gynaecology*, 28(2) 108-111.
- Health System Fact Sheet (2003). Reproductive Health Status in AP. <http://www.ih.org.in/Healthsystemsfactsheets/Reproductivehealth.htm> (Accessed 20 May 2015)
- Johri, A., Prasad, K.S. and Chakravarty, S.K. (2012). Folk Media for Dissemination on HIV/AIDS Prevention and Control in India. In: 19<sup>th</sup> International AIDS Conference, Washington DC, USA, 22-27 July 2012, Abstract No. THPE150.
- Li, L., Wu, Z., Lin, C. et. al. (2009). Mass Media and South HIV/AIDS in China. *Journal of Health Communication*, 14(5) 424-438.
- Mgcini, S. (2008). Social Behaviour Studies in HIV/AIDS at the University of South Africa. Master Dissertation, University of South Africa.
- Nwagwu, W.E. (2008). Effectiveness of Sources of HIV/AIDS Awareness in a Rural Community in Imo State, Nigeria. *Health Information and Libraries Journal*, 25(1) 38- 45.
- Oboh, V.U. and Sani, R.M. (2009). The Role of Radio in the Campaign against the Spread of HIV/AIDS among Farmers in Makurdi Local Government Area of Benue State, Nigeria. *Journal of Social Sciences*, 19(3) 179-184.
- Oboh, V.U. and Tsue, P.T. (2010). Awareness of HIV/AIDS Pandemic among Rural Farmers in Vandeikya Local Government Area of Benue State, Nigeria. *Ethno Med*, 4(3) 183-189.
- Obono, K. (2011). Media Strategies of HIV/AIDS Communication for Behaviour Change in South West Nigeria, 5(2):147-170. <http://Africanajournal.org/Wp-Content/uploads/Media-Strategies-of-HIVAIDS-Communication-For-Behaviour-Change-In-South-West-Nigeria-AFRICANA-Vol5-No2.pdf> (Accessed 20 November 2014)
- Odutolu, O., Ahonsi, B.A., Gboun, M. and Jolayemi, O.M. (2006). The National Response to HIV/AIDS in Nigeria: A Nation on the Threshold, Pp. 242-279. Harvard University Press. <http://www.apin.harvard.edu/Chapter11.pdf> (Accessed 22 February 2015)
- Oronsaye, F.E. and Oviasogie, F.E. (2014). Awareness of HIV/AIDS among Rural Population in Edo State, Nigeria. *Journal of Medical and Applied Biosciences*, 6(1) 83-87.
- Panford, S., Nyaney, M.O., Amoah, S.O. and Aidoo, N.G. (2001) Using Folk Media in HIV/AIDS Prevention in Rural Ghana. *Journal of Public Health*, 91(10) 1559-1562.
- Singhal, A., Mondal, S., Sharma, D., et. al. (2007). Intervening with the Indigenous: An Action-Based Folk Media Campaign and Research Project on HIV/AIDS in Rural Bihar. <http://utminers.utep.edu/asinghal/reports/Bihar-Folk-UNAIDS-Final-Report-10-30-07.pdf> (Accessed 25 April 2015)
- UNAIDS (2014). Report on the Global AIDS Epidemic Pp. 1-4. [http://www.unaids.org/en/media/unaids/contentassets/documents/pressrelease/2014/07/20140716\\_PR\\_Gapreport\\_En.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/pressrelease/2014/07/20140716_PR_Gapreport_En.pdf). (Accessed 24 December 2014).
- UNICEF (2013). Nigeria. Country Programme Document 2014-2017 [http://www.unicef.org/nigeria/2013-PL7-Nigeria\\_CPD-final\\_approved-English.pdf](http://www.unicef.org/nigeria/2013-PL7-Nigeria_CPD-final_approved-English.pdf) (accessed 24 April 2015)
- Wenje, .P, Erick, N. and Muhoma, C. (2011). 'Wende Luo' (Luo Songs) as an Intervention Tool in the Fight against HIV/AIDS among the Luo of Western Kenya. *Journal of AIDS and HIV Research*, 3(8) 151-160 <http://www.academicjournals.org/jahr>. (accessed 7 May 2015).
- World Health Organization (2014). HIV/AIDS: Key Facts. <http://www.who.int/mediacentre/factsheets/fs360/en/> (accessed 7 November 2014).
- Zwaal, P.N. (2003). Narratives for Nature: Story Telling as a Vehicle for Improving Inter-Cultural Dialogue on Environmental Conservation in Cameroon. Master Dissertation, Leiden University, Netherlands

**Janet Adekannbi** is a lecturer at Africa Regional Centre for Information Science, University of Ibadan, Nigeria. She holds master and doctoral degrees in Information Science obtained from the University of Ibadan.



**Kehinde Ibidunni Dada** is currently a System Analyst in the Information and Communication Technology Centre of the Federal University of Agriculture, Abeokuta, Ogun State, Nigeria. She is a graduate of Mathematical Sciences (Computer option) from the University of Agriculture, Abeokuta and holds Master's degree in Information Science from the University of Ibadan. Issues.



# Records Management and Football Administration in Ghana

**Thomas Nuamah Yeboah, Musah Adams and Pino Akotia**

*Department of Information Studies.*

*University of Ghana.*

*Legon, Ghana*

*[Freeman2000@yahoo.com](mailto:Freeman2000@yahoo.com)*

*[tarnadaus@yahoo.com](mailto:tarnadaus@yahoo.com); [madams@ug.edu.gh](mailto:madams@ug.edu.gh)*

*[pakotia@ug.edu.gh](mailto:pakotia@ug.edu.gh)*

## Abstract

*This study seeks to evaluate the nature and scale of the Ghana Premier League Board's records management practices, and propose recommendations based on findings. The study was qualitative. Data used for analysis were drawn from twelve (12) respondents with the use of face-to-face interviews and personal observations. The major finding of the study was that there was lack of appreciation of the function of reliable and authentic records in institutional development. This finding obviates serious gaps and weaknesses in the records management programme of the Ghana Premier League Board. In particular, this study has established the essence of an effective records management system for the administration of football in Ghana. Recommendations based on findings include the need for a corporate records management policy, training of records staff, staff motivations, among others.*

**Keywords:** Records Management, Football Administration, Ghana Premier League Board, Ghana Football Administration

## Introduction

The management of records is a critical element of open and accountable governance all over the world.

Governments and institutions require building up structured systems that enhance rapid access to information all the time, and at the lowest possible cost. Organisations that take their responsibilities seriously create and sustain an environment that values information and the role it plays in governance. Because institutional records are the essential evidence of decisions, actions and transactions of the organisation's interactions with the public and their records must be created and maintained as evidence of efficiency and effectiveness. The activities of organisations do not automatically result in the creation of authentic, accessible and usable records. Organisations need to develop strategies and procedures to ensure that records are created, maintained and available when required. In developing economies, the absence of reliable records and record keeping strategies, poverty reduction and economic development and other goals of good governance become seriously impaired (Akotia, 2014). According to Lipchak (2002) in any setting, poor record keeping reduces the effectiveness of programmes and services; impedes the achievement of social, economic and other goals; and reduces the confidence that citizens and stakeholders have in their governance. Poor records management entails huge financial cost in terms of wasted and inefficient work, duplicated effort, legal liability and lost opportunity.

Football is the world's most popular team sport (World Book, 2005). In Ghana, the game of football is associated with incredible amount of passion. In particular, all the emotions football engenders are evidence-based, and as such, the integrity of its records must be secured. In order to ensure the integrity of its records, the records and information management policies and procedures of the Board should "... reflect the application of the regulatory environment to their business processes" (ISO 15489-



1:2001, clause 5). This environment consists of laws and regulations including those relating specifically to records, archives, access, privacy, evidence, e-governance and data collection.

Without proper record keeping in football administration, it would be difficult to document its activities and achievements. Winners of competitions, top scorers and all-time greats are determined through the information available. Failure to record such information leaves a lot of gaps in telling the story about football. There is documentary evidence of coaches whose philosophies and ideologies of time gone by are being used by modern day coaches. Their tactics and systems have been recorded and serve as information for coaches to resort to or improve on to suit the present changing times. Significantly, football administrators must move beyond the “traditional view, of records management as an administrative responsibility, to see records management as a strategic responsibility...in the same way they might manage financial or human resources within a broad strategic framework” (O’Shea,1997).

Football administration is a subset of sports management. Kelley et al (1994) defined sport management in a broad sense as “any combination of skills related to planning, organizing, directing, controlling, budgeting, leading, and evaluating within the context of an organization or department whose primary product or service is related to sport and/or physical activity.” The highest level of football administration is in areas such as the Federation of International Football Association (FIFA), and the various confederations under FIFA such as the Confederation of African Football (CAF). At the lower levels are the various federations such as the Ghana Football Association (GFA). The Premier League Board ((PLB) like any other football administration generates large volumes of physical documents and electronic data on daily basis. These documents and data are very vital and need to be preserved for reference. Some activities and transactions undertaken by the PLB that lead to the creation of records are players registration, match reports, reports of the various standing committees such as the Disciplinary Committee, Match Review Panel, Referees Committee and Safety and Security Committee. The PLB requires for the purpose of sound administration an efficient and effective

records management system for the “... control of the creation, receipt, maintenance, use, and disposition of records, including processes for capturing and maintaining evidence of an information about business activities and transactions in the form of records” (ISO 15489-1:2001).

A lot of activities take place in the Ghana Premier League, and such activities need to be documented to help in decision making processes. Sometimes it is difficult to refer to previous league results for proper analysis. Arguments do arise about the number of league titles won by the various league clubs and the Premier League Board, which is the organiser of the league, finds it difficult to establish the fact of the matter. For instance, until 2012, Kotoko was known to have won the Ghana league in 1967, as well as 1968, but further research proved that the 1967/68 was a single league season and not two seasons, hence Kotoko lost a league title which was erroneously credited to them as a result of poor records management. Wamukoya and Mutula (2005) indicated that poor records management is guaranteed to result in information gaps that lead to the loss of document heritage.

Nevertheless, there is often confusion on issues of how many red and yellow cards that have been accumulated by players, and this sometimes leads to the deduction of points and subsequent protests. Another area of record keeping that leads to litigation in the Ghana Premier League is in the area of fines. It is surprising to know that some of the cashiers in charge of receiving fines against clubs do not keep records of fines slapped on clubs by the Disciplinary Committee and end up misleading them into missing deadlines for the payment of such fines. Football pundits hold the view that the Ghana Football Association and its subsidiary, the Premier League Board (PLB), are some of the most corrupt institutions in Ghana, because they sometimes find it difficult to provide proper records of their activities. A clear example of this happened in one of the sittings of the Presidential Commission of Inquiry into Ghana’s 2014 FIFA World Cup participation in Brazil, when the Ghana FA President, Kwesi Nyantakyi revealed to the Commission that no records were kept on the exact amount received by each of the five Black Stars Management Committee members, who shared an amount of \$412, 500 (The Presidential Commission’s Report, 2015). The Report

recommended that the GFA President should refund \$412, 500 which he failed to account for as the head of the Black Stars Management Committee. In light of the above, this study aims to discuss the current situation of records management and football administration in Ghana, as well as issues and challenges faced by the Premier League Board in the management of its records.

### **Background Information of the Premier League Board (PLB)**

The Premier League Board (PLB) which is a subset of the Ghana Football Association (GFA) was formed on the 19th of December 1993 (Obiwole, 2015). The league system in Ghana has always had an organised body since the inception of Ghana Football Association (GFA) in 1956. The GFS was directly in charge of the organisation of the amateur league from 1956/57 season to 1992/93 season. The Presidential Commission's Report (2015). The Ghana Football Association (GFA) was earlier called the Ghana Amateur Football Association (GAFA) before it was changed to the GFA. The Ghana FA was solely in charge of the organisation of the Ghana league until 1993 when Enoch TeyeMensah, the Youth and Sports Minister at the time, led a revolution for Ghana football to go professional. Structures were quickly put in place and a declaration signed by the first division clubs in Ghana at the time at Winneba leading to the formation of the Professional League Board (PLB), now designated the Premier League Board (PLB) to take charge of the day-to-day administration of the newly formed Ghana Premier League in the 1993/94 season. Ashanti Gold won the maiden Ghana Premier League and they won it for the first three seasons.

The PLB is made up of the chairman who is appointed by the President of the GFA, a vice chairman and other members, who together constitute the Board. In 2015, the Premier League Board was reconstituted to include a representative each from all the sixteen (16) clubs participating in the Premier League. The work of the Premier League Board is complemented by standing committees and departments set up by the Ghana Football Association. These committees are the Judicial Committee, the Player Status Committee, the Referees Committee, the Match Review Panel,

the Research the Information Management Committee, the Security and Safety Committee, the IT Department, the Registry, the Front Desk and the office of the GFA General Secretary.

### **Literature Review**

Records management ensures accountability in football administration. Akotia (2000) argues that the transparency of government accounts effectiveness in the use of public resources, and the stability and transparency of the economic and regulatory environment for private sector activity is provided by documentary evidence. The Ghana Football Association (GFA) is a registered body under the Company's Code, 1963 (Act 179). The Company's Code makes it a requirement for the companies to prepare their accounts, audit the accounts and prepare their financial statements. Article 38 of the GFA Statute enforces the appointment of an external auditor to audit the accounts of the GFA; and every season, league clubs submit their audited accounts to the Premier League Board.

Football administrations such as FIFA, CAF and GFA in their daily activities transact business through securing sponsorship to organise their competitions such as the FIFA World Cup, Africa Cup of Nations and the Ghana Premier League, etc. Furthermore, the Ghana government channels some of its resources into the management of the national teams under the GFA. There is a direct relationship between internal regulation and the more complete and accurate recording of decisions and actions. Records provide evidence of compliance to regulations and records management provides guarantees that the evidence is reliable. When football administration financial controls lacks a record management component, they lose their capacity to provide evidence (Barata, Cain and Thurston, 1998). Corruption has now become part of the debate in football administration and has also become a significant driver in the demand for accountability. McLaughlin and Botelho (2015) report that nine FIFA officials and four executives of sports management companies were arrested on suspicion of receiving bribes totalling \$100m (£65m). This allegation has been leveled against these football administrators as a result of the available information or records

obtained at the U.S Department of Justice. Records are usually the source of information for their investigation to ensure that the offenders are prosecuted at the law court.

The objectives of this study are to:

- (i) examine the authority, standard and practice at the Ghana Premier League Board for the management of records, including records staff and their competences,
- (ii) establish the existence of digital records management, and
- (iii) make appropriate recommendations based on findings.

## Methodology

The study was purely qualitative. An open-ended interview schedule complemented with personal observation was used to obtain data from the respondents who were made up staff of the Premier League Board totalling twelve as at the time this study was conducted in 2015 (See Table 1 for a

break-down of the respondents). The data was collected from 1st to 5th June 2015. Selection of the respondents were based strictly on Creswell's (2009) suggestion that in qualitative research, selection of respondents should be purposeful and informants should be subjects who will best provide answers in line with the research objectives. Permissions were obtained from the Ghana Football Association (GFA) and the Premier League Board (PLB) before the conduct of the study. Respondents also received introductory letters explaining the purpose of the study and informing them that participation was voluntary. In addition to interviews, observation of the offices was carried out by the researchers. Thus, there were on-site observations at various offices which made it possible to personally observe the record keeping practices and procedures. The observation was carried out at the same time as the interview sessions (1st to 5th June, 2015) aided by a checklist to ascertain the facilities and practices. Information required was obtained instantly. The interview was recorded and the data was transcribed and analysed. They are presented under major themes outlined in the findings of the study.

**Table 1: Distribution of Respondents**

Unit/Office	Respondent	Total Number of Respondents
Premier League Board Members	Premier League Board Member	2
Premier League Board Secretariat	Premier League Board Secretary	2
Registry	Registry Head	3
Ghana Football Association Emergency Committee	Committee Member	1
Chairs of Standing Committees that complemented the Premier League Board	Standing Committee Chair	1
Ghana Football Association General Secretary's Office	General Secretary	1
Information Technology(IT) Department	Head of IT	1
Front Desk	Staff	1
Total		12

**Source of data:** Field survey

## Findings and Discussions

Data obtained from interviews and personal observations were analysed using qualitative approaches. The findings and discussions are presented under the following themes:

- Knowledge and skills of records personnel
- Legal and regulatory framework
- Records creation
- Records storage
- Records retrieval
- Closing of files
- Records disposition
- Digital records management
- Electronic records maintenance
- Security classification of the records
- Vital records programme
- Equipment and facilities for the management of the records.

### The Knowledge and Skills of Records Personnel

In order to find out if the PLB had records staff with the requisite skills and knowledge on records management, respondents were asked to indicate their educational qualifications as well as trainings attended as far as records management is concerned. Responses from the interviews with respondents revealed that although none of the respondents was actively involved in record keeping, majority of the staff, nine respondents had attended seminars and workshops on records management. However, none of them had any qualification in records management or archives administration.

When probed further to find out where the workshops and seminars were attended, the nine respondents who mentioned that they had attended workshops on records management indicated that these workshops were organised in Ghana by some information management organisations. Five out of the nine respondents made available some certificates received as a result of attending such workshops. After a careful examination of the certificates presented, the researchers observed that the certificates presented were awarded by the Ghana Library Association.

One of them however lamented:

*...hmmm, well the trainings are good, because they have helped us to acquire the basic skills in records management, but we are not able to grasp some important skills in the management of records.*

Another staff member out of the five who presented the certificates also said:

*...I wish we could be sponsored by management to pursue at least some diploma or degree courses in records and archives administration, because this will go a long way to help us manage the records we receive or generate effectively.*

### Legal and Regulatory Framework

In relation to the availability of a formal records management policy (RMP), majority 10 (83%) respondents interviewed indicated that there was no policy governing the management of the records for the day-to-day operation of the PLB, whilst 2(17%) said they had a RMP.

One of the respondents from the 10 who indicated the absence of RMP made the following comments:

*...there was no standard practice or business rules that required us to create records according to the business needs and business processes that adequately document the business activities which take place in this organization, as such there are no laid down rules or regulations to ensure that information created are managed to support business activities in this organization.*

However, when probed further to find out the claims of the two respondents on the availability of RMP, observations and examinations of documents received from one of the two respondents indicated that the RMP being referred to was more of a manual

or guidelines on how and when records should be generated at the PLB. This confirmed the finding that the PLB did not have any comprehensive policy on how records should be managed.

### **Records Creation**

With reference to the types of records created at the PLB, responses from all the 12 respondents revealed that there were different categories of files created by the PLB. The broad categories of records mentioned included: policy files relating to the formulation of policy and procedures, operational or subject files which dealt with PLB implementation of policies and procedures, administration files dealt with the usual housekeeping matters with subjects such as building, equipment, supplies, finance and personnel, as well as with general internal administration, case files containing information on a wide and range of players and clubs. Case files were either operational (such as referees' files) or administrative (such as personnel files).

Observations also showed that the Registry of the Ghana Football Association (GFA) was the main administrative unit of the PLB responsible for the life cycle management of the records. This unit was responsible for exercising consistent pattern of control and oversight because of its strategic objectives which include: the establishment and maintenance of record keeping systems and procedures, creation and maintenance of the necessary control documentation, training records staff and action officers, and ensuring the proper storage and security of all PLB records. These functions are ignored resulting in a low level of professional practice. For example, general and agency disposal schedules have not been developed; and thus, there was no disposal programme.

### **Records Storage**

The researchers enquired whether the PLB had different records units for the different categories of records created and received. The responses from the interviews with the records staff revealed that there was proper storage of current and semi-current records at the PLB, but non-active records were not well attended to. The researchers observed that both current and semi-current records were under very good condition in the registry, where the

files were stored in two fireproof vertical file cabinets and the room was well ventilated.

Another observation made by the researcher was that files were well arranged, making their retrieval easier. The researchers also noticed that some records were kept outside the registry, especially financial records and audited financial reports of the clubs. These were kept in the Accounts Office and the main PLB Secretariat, respectively. When asked why financial records and audited financial reports of the clubs were kept outside the registry, responses from three of the respondents revealed that this was for the purposes of auditing, but transferred to the registry at the end of every league season.

Furthermore, on records storage, one of the respondents also said:

*"... Well, the records that are not needed anymore (Inactive files) are kept in a store room, called 'Archives. We have two of such archives; one is the GFA building where the PLB is located and the other at the Ghanaman Soccer of Excellence, Prampram"*

When probed further to find out how these inactive records were stored, the researchers again observed that although the storeroom had file cabinets, some of the records were not well filed. Some records were seen lying on the floor and left to the mercy of the weather.

### **Equipment and Facilities for the Management of the Records**

During the interview and also from the observation carried out, it was revealed that the Registry which manages current records of the GFA had three fireproof cabinets, but no air conditioner. Three officers were in charge of the facility. There were also two storerooms known as archives, where closed files that did not have any current value were transferred. One was at the office of the Ghana Football Association and the other two, at the Ghanaman Soccer of Excellence at Prampram. Files created were stored in the registry until they were full and closed and the files were then transferred to the archives at the GFA. Records in the archives

dated back to 2010, but records beyond that were at the Ghanaman Soccer of Excellence at Prampram. The records especially those at Prampram were dumped on the floor and had not been properly arranged. At these dead storage facilities where there was no control, accurate inventories did not exist and no attempt had been made to dispose of them. Of the 12 staff interviewed three were not satisfied with the equipment and facilities available for managing records, while nine were satisfied with available facilities.

### **Records Retrieval and Tracking**

To determine whether records were retrieved on time on request, respondents were asked to indicate whether records were retrieved on time or not. Almost all the respondents 11 mentioned that records of the PLB were not retrieved and issued out on time. One of the respondents complained

*“...it is very difficult to control the movement of files in the registry because many of the officers do not fill the request forms at the office and some keep files for long periods in their offices, which led to officers on leave locking up files in their drawers while away”.*

It is interesting to note that the researchers in the course of this study became victims of the poor tracking system of the records at the PLB, because the introductory letter sent to the Board got missing and another letter had to be sent, which in the end delayed the collection of information for this study. This indicates that there were weaknesses in the tracking of records at the Board. In particular, the success of a records tracking system depends on the people using it. All staff of an organisation should be aware of the importance of the system and fully acquainted with its operation. However, an observation made by the researchers indicated that the registry of the PLB had a register that is used to control file movement within the organisation. There were no rules and procedures for controlling file movement at the PLB. As a result, it was difficult to attempt enforcing compliance since co-operation of action officers and file users was essential if the

movement of records is to be accurate and reliable. To come to a conclusion as to whether records were retrieved on time or not, a follow-up question was posed to respondents to find out how fast records were retrieved on request. Respondents were given time options (0-1, 2-3, 4-5, 6-7, 8-9, 10+minutes) to choose from. The responses show that, records were not retrieved on time when a request was made.

### **Closing Files**

According to the respondents, files were only closed when they were full, and then transferred to the store room when they were not frequently used. Of the 12 participants, five were not satisfied with the way closed files were handled, while seven were satisfied. There was a split opinion from the interviewees on how closed files were handled. The researchers however observed that some of the closed files were not in shelves in the storeroom, making them vulnerable to unauthorised access and destruction in the near future. When files are closed at the PLB, no further papers are added and the word “CLOSED” is written diagonally in bold letters across the front cover with the date of closure noted beside it. All the respondents 12 noted that although no new action may be taken on a closed file and no new papers added, they remain current in the sense that they were required for reference in the conduct of business.

### **Records Disposition**

In response to disposition of records of the PLB, one of the respondents said:

*...the PLB has no record disposition programme, so the normal practice is to use our reserve storage facilities as dumping grounds.*

Another respondent also added:

*...because we don't have a plan on how to dispose records, we have no option than to use our discretion to generate a strategy to dispose our records in order to control the build-up of records.*

The responses from interviews with respondents on records storage were worrying because the effective life cycle management of records is only possible if there is adequate storage for semi current records. This is what makes the records centre or reserve facility one of the most important parts of a well-organised records management programme. In the present state, the collective memory of football administration in Ghana is in danger, because semi-current and non-current records are mostly dumped without proper care, hence some of them are deteriorating faster. If this situation continues, Ghana will be the loser without the lessons of the past which should provide important knowledge in defining, understanding and addressing new problems in football administration.

### **Digital Records Management**

Information was sought on how fast the Board was adapting to modern trends in records creation. The responses from the interviews revealed that records created at the PLB were in two formats, namely: paper records and digital records. The respondents also indicated that the PLB prefers to receive and send mail electronically.

Furthermore, the respondents also disclosed that the registration of players who played in the Ghana Premier League is an electronic digital process, and this was made possible with a software called E-License Plus. This software, one of the respondents mentioned, was managed by the IT Manager and the clubs of GFA. When asked to explain, a respondent clarified that each club was given a password and the software to register the number of approved players for the season. A back-up of the records created by the E-License was kept in Tunisia. Another software used by the PLB to manage its records electronically was Competition Management System which generates the league fixtures, tables, goal king charts and number of appearance by players in the League.

In addition, responses from the interviews with the respondents also revealed that not all paper documents received by the PLB were scanned, but plans were in place to scan all incoming mails and documents. One of the respondents lamented:

*...Only the IT Department scanned documents that they received from*

*other departments.*

Finally, all the 12 respondents were in agreement that they kept some of their documents electronically, but only 3 mentioned that, in addition, they tried to make sure they generated electronic versions of every document in their custody.

The researchers also observed that all emails generated and received had been backed up to prevent loss. Electronic files created were automatically saved as a back-up onto a hard drive in the IT office.

### **Electronic Records Maintenance**

The study further investigated the security measures put in place to secure information in the records system. Responses from the interviews revealed that electronic records were stored on hard drives and other secondary devices such as external hard drives as backups.

Again, respondents mentioned that passwords were used to access the information and such information could not be accessed by any unauthorized users. Other security measures put forward by the respondents were the use of firewalls to prevent unauthorised access to or from a private network and also antivirus to prevent virus attack.

One of the respondents indicated:

*“...The IT office which manages the electronic records of the PLB ensures that their equipment was serviced every quarter to prevent hardware failure.”*

On hardware and software obsolescence, the respondents revealed that the IT office uses different software at different times for the registration of players. Some software mentioned were Architecture Description Language (ADL), and Scientific Data Management System (SDMS) .

When asked about the control systems in place, eight of the respondents played direct roles in the management of records at the PLB, and when asked about the control systems in place, all the eight said that there were procedures for ensuring that the content of the records they had in their possession remained intact. They had both manual and electronic systems in place. One of the respondents mentioned:

*--we have a file movement book that is used to track the movement of files within the Board, to prevent the loss of files.*

Another respondent also reiterated:

*...all electronic files saved automatically goes to the IT department as a back-up. Passwords are also required on the various computers to prevent unauthorized access, and these computers and other equipment have anti-viruses installed to prevent virus attack and firewalls.*

### **Vital Records Programme**

All the 12 respondents during the interview sessions admitted that confidential and secret records were handled separately. Some records designated as confidential included contracts of players and coaches which were mostly stored in the office of the GFA General Secretary and a copy stored in the President's office as backup.

When asked if there were information disaster management plans available, all the 12 respondents indicated that the PLB had no written plans for protecting records in case of any disaster. In the quest to find out if there were any measures put in place for mitigating disasters, a follow up question was asked requiring respondents to indicate whether they had fire extinguishers, smoke detectors, fire detectors among others. Available equipment investigated were fire extinguishers, smoke detectors and fire detectors. From the responses, it can be deduced that, even though the PLB did not have information disaster plans, in practice there were some measures in place to protect the records in case of disasters. Nevertheless, the researchers observed that the smoke detectors, the fire detectors and the fire extinguishers available were inoperative.

### **Conclusion**

Despite the benefits for using information, this study demonstrates more effectively that in important institutions such as the GFA and PLB still lacked appreciation of the function of reliable and authentic

records in institutional development. The findings demonstrate serious gaps and weaknesses in the records management programme. Records staff have little or no records management training, and other staff who create records neglect to capture them in a system that supports preservation and access or fail to plan for their disposal in a systematic way. The creation and preservation of PLB records needed by the organisation cannot be guaranteed unless records management issues are addressed when records creating systems are designed and implemented. Just as an effective records management programme should cover records in all media, so it should accept responsibility for all records of the organisation regardless of their age. Ineffective records management breeds litigation, and it is not surprising that clubs sometimes take the association to court on issues such as yellow and red cards accumulated by a player that could have been settled through proper record keeping. This unnecessarily delays the football calendar in Ghana. There should be in place a policy framework and plans to manage records at the Board. Skilled records managers, effective digital recordkeeping systems, proper storage of the records to preserve them for longer periods should be part of the records programme.

### **Recommendations**

Based on the findings of the study, the following recommendations have been made to support the PLB's important mandate in football administration and to address the gaps and weaknesses in its records management.

#### *Records management policy*

The study has established that there is the need for the PLB to develop comprehensive records management policy to provide mandate and direction to its records management practices. The policy will ensure the transparency of records and the adequacy of records systems under a continuum of care, and the PLB can consult an agency such as the Public Records and Archives Administration Department in Ghana (PRAAD) in the development of such a policy.

#### *Digital records*



Effective technology-based systems are needed to support records management activities. Applications and systems standards and procedures must be improved. Adequate governance, accountability and staff support arrangements are of particular importance. Information literacy programmes should be organised for the records staff through seminars and workshops.

#### *Training*

There is a need for a concerted effort at defining categories of training needs and identifying priorities and planning the training programmes. Staff could be sponsored to attend refresher courses in records management. These could be periodically organised by the Public Records and Archives Administration Department (PRAAD) and some private consultants. If possible, staff should be sponsored and allowed to pursue some diploma and degree courses in records and archives administration at the Department of Information Studies, University of Ghana.

#### *Improved storage systems*

The storage of both semi-current and non-current records which serve as institutional memory for future reference is to be improved. There should be fireproof and waterproof file cabinets in the storeroom for non-current records. Effective collaboration with the Public Records and Archives Administration Department (PRAAD) to ensure records are transferred periodically to reduce the pressure on the limited space in the storerooms. Also, there should be appraisal of records on a regular basis to ensure records which do not have continuing value are destroyed.

#### *Effective control of file movement*

There should be rules and procedures to control file movement at the Registry. These rules and procedures should be enforced by the records officer to ensure compliance by users. In addition to the file movement book, the file transit slip system which is a more effective way of monitoring movement of files between action officers should be introduced.

## References

- Akotia, P. (2000). Management of Public Sector Financial Records in Ghana: Implications for Good Government. *African Journal of Library, Archives and Information Science*, 10 (1) 153-166
- Akotia, P. (2012). *Records Management: Principles and Practice*. Legon: NAB Superior Services.
- Akotia, P. (2014). Audit and Accountability in the Government of Ghana: A Records Management Perspective". In Lowry, J and Wamukoya, J (Ed) *Integrity in Government through Records Management*. Farnham: Ashgate.
- Barata, K., Cain, P., and Thurston, A. (1998). *Accountability and Public Sector Management: The Management of Financial Records in Sub-Saharan Africa*. ESCOR R706. Report to the Department for International Development. London: International Records Management Trust.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Los Angeles: SAGE Publications
- Ghana Football Association (2013). *Ghana Football Association statutes*. Accra: Naque Ventures.
- International Standards Organization.(2001). ISO 15489-1. *Information and Documentation and Records Management Part 1: General*. Geneva: International Standards Organization.
- International Standards Organization .(2001). ISO 15489-1. *Information and Documentation and Records Management Part 2: General*. Geneva: International Standards Organization.
- Kelley, D. R., Beitel, P. A., DeSensi, J. T., and Blanton, M. D. (1994). Undergraduate and Graduate Sport Management Curricular Models: A Perspective. *Journal of Sport Management*, 8(2), 93-101.
- Lipchak, A. (2002). *Information Management to Support Evidence-Based Governance in the Electronic Age*. A Public Policy Forum

Discussion Paper, Ottawa.

Mclaughlin, E. C. and Botelho, G. (2015). *FIFA Corruption Probe Targets 'World Cup of Fraud' IRS Chief Says*. Retrieved from: <http://edition.cnn.com/2015/05/27/football/fifa-corruption-charges-justice-department/>

National Archives of Australia. (2015). *Policies, Procedures and Guidelines*. Retrieved from <http://www.naa.gov.au/>

National Archives of Australia. (2015). *Information and Records Management Policy – template*. Retrieved from <http://www.naa.gov.au/>

National Archives of Australia AS 4390 (1996). *Records Management, Australia Standards*. National Archives of Australia.

Obiwole, B. (2015). An Investigative Study of Sponsorship in the Ghana Premier League. Available at: <http://air.ashesi.edu.gh/file/fileid/5/abiola-obiwole-2015-5—413>, Accessed on: 11/03/2017

O'Shea, G. (1997). The Australian Records Management Standard (AS 4390-1996): Development and Process, ACARM Newsletter.

Presidential Commission of Inquiry. (2015). Report of the Commission of Inquiry into Matters Relating to the Participation of the Black Stars Team in the World Cup Tournament in Brazil 2014. Accra.

Wamukoya, J. and Mutala, S.M. (2005b). Capacity Building Requirement for E-Records Management: The Case of East and Southern Africa. *Records Management Journal*. Retrieved from <http://www.emerald insight.com/Insight/viewContentItem/>

World Book. (2005). *The World Book Encyclopedia: Soccer*. Toronto: World Book Inc.

**Thomas Nuamah Yeboah** is the Sports Editor at Pulse.com.gh, He holds B.A. and MA Information Studies degrees. He attended Kwame Nkrumah University of Science and Technology, Kumasi, Ghana (KNUST) and the University of Ghana, Legon.



**Dr. Musah Adams** is Senior Lecturer in the Department of Information Studies, University of Ghana. He holds his BA, M Phil, and PhD degrees. He attended the University of Ghana.



**Dr. Pino Akotia** is a Senior Lecturer in the Department of Information Studies, University of Ghana. He holds a Ph.D degree. He attended the University of Ghana and University of London.



# Measuring the Scholarly and Judicial Impact of Accredited Legal Journals in South Africa

**Solomon Bopape**

*Department of Media, Communication and Information Studies*

*University of Limpopo,*

*Private Bag X 1106, Sovenga, 0727*

*Polokwane – South Africa*

*solomon.bopape@ul.ac.za*

## Abstract

*Legal scholarly journals are primarily written to influence those who read their content. Their influence is usually measured by counting the number of citations made of them in the subsequent articles and judicial publications. This study measured the impact of South African legal journals' content, by counting the number of times these journals have been cited and mentioned in subsequent legal journal articles and judicial decisions (judgements) through the use of Google Scholar (GS) citations and Butterworth Lexis Nexis database respectively. The results of the study revealed variations in terms of the citation patterns of legal journals in legal scholarship and judicial rulings. The most heavily cited journals in South Africa are relatively new and disseminated through the open access mode, while journals which are highly cited by judges in judicial decisions or law reports appear to be those that have been in existence for a long time. Further research on the most influential legal journal articles and authors could perhaps improve the chances of South African legal journals being internationally recognised.*

**Keywords:** Scholarly impact, Judicial influence, Citation counting, South Africa.

## Introduction

Usually, when lawyers present their legal arguments, and judges write their legal opinions or rulings, they repeatedly cite authority from legislation and cases, and refer to influential secondary works such as textbooks, treaties, commentaries and legal journal articles (Martin, 2015). Similarly, legal academics, students and researchers refer to primary and secondary literature to publish articles and reviews in legal scholarly journals, which contain articles, notes, commentaries, as well as discussions on legislation and case law. Legal journals also provide a vehicle through which legal arguments, opinions, ideas and research findings are disseminated. Shapiro (2000) states that 'legal scholarly journals are considered primary mechanism for the dissemination of legal scholarship.' Mann (1986) notes that 'there are a number of legitimate purposes for publishing articles or reviews in legal scholarly journals; the most significant one being to influence their users such as academics, legal practitioners, legal researchers, students, judges and policy makers. One method of evaluating if the articles obtained in legal journals succeed in achieving this significant purpose is to ascertain the number of users who have read their content and have been influenced by it. This is done by counting the number of times the influential articles have been cited or referenced by those who read them (Lowe and Wallace, 2011). Therefore, the influence, impact, value and quality of any legal journal content can be measured most significantly by counting the use made of it. A citation frequency is a measure of the quality or influence of legal journals' content. Journal articles that are frequently cited by legal researchers and practitioners are presumed to have a good reputation, prestige and greater influence or impact on the development of law in every

jurisdiction. They are assumed ‘to be more trusted and are sought-after as vehicles for new publications’ (Gilmore, 2010). Maru (1976) also points out that “the journal that is never used is without value; one that is often used is valuable.”

According to Dendy (2000) and Schulze (2013), there has been a proliferation in the number of legal scholarly journals published in South Africa. The conspectus of South African legal journals (Schulze, 2013) also shows a massive proliferation of legal journal titles during the last forty years in South Africa, of which content has played a significant role in the development of law and judicial science in the country. The increase in the number of legal scholarly journals in South Africa is attributed to a dramatic increase in the number of law students and academics after the democratic dispensation of 1994, and the implementation of the Revised Policy and Procedure for Measurement of Research Output of Higher Education Institutions (2003) in 2005 (Mouton and Boshoff, 2008; Schulze, 2013). Most of these law journals are published by legal commercial publishers in South Africa, for example, Juta law and Butterworths law under the auspices of law schools attached to various South African universities. Some are also being published by non-governmental organisations. With the large and increasing number of legal scholarly journals available both in print and electronic formats, most authors and readers, including judges, may find it difficult to determine which journals to focus on in their conceptualisation of legal arguments and opinions. Ranking legal journals in terms of their impact, therefore, could be a means of helping legal scholars to choose journals in which they could publish their articles, and on which judges could rely in their presentation of legal opinions and judgements.

This study ranks the South African accredited legal journals and evaluates the influence or impact in the development of legal scholarly content and judicial publication in South Africa. The study aimed to:

- count and establish the number of times that legal journals’ content have been cited by legal scholars and court judges in both scholarly legal journals and judicial decisions or rulings, respectively;
- establish the differences in citation patterns of South African legal journals’ content in

scholarly communication and judicial publications;

- establish the citation frequency of articles in all accredited legal journals by legal scholars and judges in South Africa; and
- identify the determinants of citations frequencies for legal journals in South Africa.

Quality in legal scholarship and judicial opinions has long persisted as intangible and elusive but an important element of legal education and research (Chen, 2006). Legal researchers, judges, lawyers, law professors and students were used to discuss and argue about cases and legislation through legal journals’ content but without any means to measure the impact or influence of those discussions and arguments. Maru (1976) advises that collected data such as library circulation statistics and opinions of users are in some ways indicative of the extent of usage of journals. But such data are vague and full of ambiguities. Scarcity of quantitative scholarship has therefore been a serious shortcoming in legal research (Posner, 2000).

However, with the introduction of citation resources and improvements on legal databases’ features, citation counting and analysis has today become a well-established method of empirical research, not only in law but also in other disciplines. Shapiro and Pearse (2012) observe that ‘commercial databases and publisher platforms for journals have also begun to serve as additional sources for citations, such as adding “cited by” or “times cited” features, and sometimes “most cited” feature within the confines of database content.’ With the introduction of these resources, the journal impact factor has become the bread and butter of measuring the quality of scholarly content across fields and disciplines (Jennings, Higgins and Khey, 2009). Citation counting can today be done through the use of citation resources or databases such as ISI Web of Science, Scopus and Google Scholar (GS) citations for scholarly citations and legal databases such as Butterworth Lexis Nexis. There are a number of purposes for which citation data could be used.

### **Legal Authors and Researchers**

According to the National Research Foundation (2014), possible ways by which researchers could

claim to have international recognition is by publishing research in peer reviewed journals that are regularly cited by international peers. Shapiro (1991) notes that “authors have been evaluated through tabulation of citations to their writings and further that citation counts have been used in assessing scholars” works for purposes of grant awards, tenure or promotion decisions. ‘This exercise is therefore a thoughtful business in legal scholarship in that it may provide an indication of where legal academics and writers obtain their ideas’ (Ramsay and Stapledon, 1997). It is increasingly important for researchers to know whether or not their research reaches the intended audience, and whether their peers engage with their research findings (Pretoria University Law Press, 2013). In this context, it could be useful to be able to compare the so-called impact factors of different journals that a researcher considers when deciding where to submit his or her article for publication.

Citation studies enable rigorous quantitative analysis of reputation, prestige, quality and influence of scholarly output and productivity of scholars and law schools (Posner, 2000). George (2006) expresses the view that evaluating and ranking law schools and departments based on research output and scholarly production is a well-established, appealing and familiar practice. Since most legal journals are published by law schools, ranking them in terms of their quality serves as a basis for allocating research funding for these schools (Svantesson, 2009; Mouton and Boshoff, 2008; Einsenberg and Wells, 2014). Law school faculty members are rated by how many articles they have published in “most-cited” law reviews (Scott 2003). The quality of law schools from which these legal journals are produced is reflected in the citation data of those law reviews (Brophy, 2007).

### **Law Libraries**

Libraries may also use journal ranking to make collection development decisions because librarians want to acquire relevant materials that are frequently used by library patrons (Obuh and Babatope, 2011). ‘Many law libraries would have a comprehensive collection of all law journals, and may, therefore, seek to build a core collection of what might be regarded as influential law journals’ (Ramsay and Stapledon, 1997). Through citation analysis, law

libraries are able to add in their collection, only journals that are highly rated and regarded as core legal resource, for example, the University of Michigan Law Library utilised information obtained from published citation studies to design a policy for limiting the number of duplicate copies of law review titles held in their collection (Brown, 2002).

### **Judicial Citations**

Law review articles are often cited by judges in their judgements or decisions, and by regulatory authorities in the making of law, regulations and policy (Trautman, 2014). Journal articles cited in judicial opinions or law reports have an influence on a judge’s decision making. Dolores (2002, in Pierce and Reuben, 2010) notes that:-

To practitioners and judges, law reviews can provide an expeditious vehicle by which to receive a comprehensive introduction to an unfamiliar field of law written by scholars who have studied and taught in the field or by experienced practitioners who are personally involved with that subject. They may offer useful insights on unresolved issues, particularly when there is more than one point of view.

Therefore, prevalence of journal articles in court opinions or law reports becomes one of the most standard and esteemed measurements of journal impact. Shapiro and Pearse (2012) point out that “because legal scholarship relates to law and thus, to the making and interpreting of law, another metric for measuring legal scholarship is whether it has influence on the bar, judges, legislators, and other policy makers.”

### **Limitations**

Shapiro (1985) states that citation counts have limitations. Some citations may result in favouritism wherein scholars give credit only to the people that they know for the purpose of that favour in return. Other authors resort to self-citations, which may inflate their citation total. Some works may be cited for wrong reasons, for instance, the work of a particular author may be criticised, resulting in higher citation rate because of its widespread criticism

(Shapiro, 1985; Ramsay and Stapledon, 1998). Another possible problem of citation counts may be the phenomenon of “obliteration”, wherein the work of some writers is so influential to the point that scholars no longer feel it necessary to cite it explicitly’, resulting in a loss of points for the inventive author (Shapiro, 1985). Tintle (2007) cautions that measuring the impact of legal journals based on citation counts may also result in “anxiety of authority”, prompting excessive and extensive citations by authors. This implies that authors become insecure about the capacity of their written products without citations thus they resort to unnecessary citations. The other negative impact of journal ranking is that authors may target highly ranked journals which will automatically become more prestigious than lowly ranked ones (Svantesson, 2009). However, these limitations should not be viewed as undermining the value of citation analysis or counting (Ramsay and Stapledon, 1998). Mann (1986) writes that:-

The use of citation counts to measure scholarly and judicial impact using citation resources remain a respectable methodology which has been used in other disciplines as well. Out of all data used to evaluate legal journals, only citation counts provide a measuring tool for the evaluation of legal scholarly literature.

Therefore, despite its limitations, ‘citation counting remains a convenient quantitative measure of quality of legal journal titles’ (Maru, 1976; Scott, 1989; Posner, 2000). Chen (2006) argues that the truth routinely manifests itself through mathematical means, and most things can be measured through numbers, of which quality of legal scholarship is among those things.

## Literature Review

A legal citation is the practice of crediting and referring to authoritative documents and sources such as court decisions (cases), statutes, regulations, government documents, treaties, and scholarly writings by authors (Martin, 2015; Posner, 2000). It is the scholarly practice of supplying references for

ideas and quotations in the form of footnotes and citations (Shapiro, 1985). Tintle (2007) notes that academic legal writing is known for extensive citation and the use of citation as a means of managing impression. Legal journals are therefore very well suited for citation analysis or study, because developments in law, legal research and writing rely heavily on citations and footnotes. Citations are the cornerstone upon which judicial opinions and law reviews stand (Liebler and Liebert, 2013).

According to Shapiro (1992), there is a long history of citation studies in law. Although Information Science literature asserts that the earliest occurrence of citation analysis was done in science literature, Shapiro (1992) proclaims that legal citation analysis was practised in the legal field long before it was introduced in scientific literature. This assertion is constructed on the fact that Eugene Garfield’s development of the Science Citation Index (ISI) was directly inspired by Shepard’s Legal Citation Index (Shapiro, 1991), as Eugene Garfield has later acknowledged (Ogden, 1993). There are a considerable number of studies that ascertain the most heavily cited legal journals and journal articles in legal scholarly communication and judicial practice. The earliest studies on the most heavily cited law reviews are well documented in Scott (1989). Among these studies, Fred R Shapiro relishes a lion’s share of studies on heavily cited legal journal titles and articles; thus he is well known across the world for having published a series of articles on the subject. In South Africa, Mouton and Boshoff (2008) conducted a bibliometric study of law journals devoted to investigating the publication productivity, that is, the total number of articles published per journal, and the total number of authors contributing to the journal, without looking into the total number of citations per article in each journal, and in judicial opinions for the period under review.

Despite the increasing number of legal journals in South Africa, very few are recognised internationally, as most of them are not registered with ISI Web of Science, Scopus and International Bibliographic Serials Standards (IBSS). Several studies have also been conducted elsewhere to measure the relative impact of legal journals by examining the citations of scholarly articles in judicial decisions or judgements (Mann, 1986; McCormick 1996; Kopf, 1997; Ramsay and Stapledon, 1997;

McMahon 2001; Crespi 2003). Unfortunately, this is one of the aspects that has not received any attention by legal researchers in South Africa, despite having tools in Butterworth Lexis Nexis and Juta databases that could be used to quantify the number of articles cited in our law reports.

Furthermore, international law journals are persistently condemned for mediocrity by judges and other legal practitioners. Merritt and Putnam (1996) noted that the reputation of legal scholarship is denounced to becoming increasingly irrelevant to and out-of-touch with the attorneys and judges. Crespi (2003) also reckons that 'prominent jurists and practitioners have claimed that legal scholarship has become more dissociated from practical concerns and that it is of little relevance to attorneys and judges.' Peters (1981) also asserts that 'there is an increasing divergence between the theoretical interests of the aspiring academic lawyer and the pragmatic interests of the successful practitioner.' Pierce and Reuben (2010: 1185 - 1186) make mention of the studies that show the decline in citations to law reviews or journals from 1970 to 1990.

Whilst legal scholars interpret and cite court judgements and legislation to write and publish legal articles in legal journals, it might not be known if court judges and other legal practitioners also depend on legal journals to make court decisions. This is due to lack of studies on "most cited legal journals" in South Africa. Therefore, establishing a difference in citation patterns of South African legal journals' content between the scholarly communication and judicial practices would provide a picture of how well the legal scholarly journals play a role, not only in the legal scholarly communication, but also in decision making circumstances of the South African court judges. Through this study, the significance of the South African legal journals in the development of law and judicial science in the country will be established. Therefore, the current study focuses on the number of papers per journal, the number of citations received, the average citation frequencies for those articles, and the age of the journal.

## Methodology

The principal sources of citation data in all the disciplines are the indexes published by the Institute

for Scientific Information (ISI), which is a company founded by Eugene Garfield. ISI publishes Science Citation Index (SCI), Social Science Citation Index (SSCI), and the Arts and Humanities Citation Index (AHCI). These products are made available online through the Web of Science (WOS) service for a fee or on subscription. These database products provide information to identify the articles cited most frequently, and by what publisher and author (Thompson Reuters Inc, 2014). Unfortunately, not all legal journals in South Africa are registered with these resources, and evaluating the impact of only three journals that are currently registered would not be valuable as sought after. Therefore, in order to stimulate future research on the impact of South African legal journals, the only platform where one can access the impact of every journal published in South Africa is Google Scholar (GS) citations, through the use of Harzing's Publish or Perish tool. This is a software program used to retrieve and analyse academic citations from GS.

Although GS has been condemned for its lack of transparency concerning content (Golderman and Connolly, 2007), it is, esteemed for creating avenues and opportunities for academics to search, track and analyse citations in their disciplines (Adriaanse and Rensleigh, 2011). The most valued advantage of GS over other citation resources such as Scopus and WOS is its free availability on the internet. Shapiro and Pearce (2010) praise GS for its ability to source data from other databases such as SSCI, and for 'offering citation counts for its citations, indicating how many times a particular item has been cited in other sources covered by GS'. The other feature that makes GS dependable is that one can make use of the International Standard Serial Number (ISSN) when in doubt about the name or title of the journal.

With regard to judicial citation of legal journals, data was obtained by conducting a so-called "focus search" on Butterworth Lexis Nexis database. The exact name or title of each journal evaluated was entered into the "exact phrase" search box, under the "law reports library". The results automatically display the number of incidences in which the exact journal name is mentioned in all the law reports. Twenty-one (21) journals accredited by the Department of Higher Education and Training (DHET) obtained from Southern African Bibliographic Network (SABINET) Online website

Ltd. (2016) were evaluated. On this website there is a link to the South African online journals in different subject fields, including the link to the South African electronic law journals. Only journals that show accreditation by the DHET and registration on IBSS and ISI were selected. This amounted to twenty-one journals that were finally used in this study.

## Results and Discussion

### Scholarly Citations

The number of papers published in each journal, the number of citations accomplished, the average number of citations each journal received, and the age of the journal is presented in Table 1. The table is arranged according to the average citation generated by Google Scholar, for each journal in descending order, that is, from the highest to the lowest. Ranking journals by average citation is the common method used in citation studies. Mann (1986) and Maru (1976) used a similar method in their evaluation of the use of periodicals by courts and journals, as well the evaluation of the impact of legal journals in the U.S.A respectively.

One of the notable findings of this ranking is that new journals with lesser number of papers or articles are cited more frequently than the older journals containing a large number of articles or papers. The *African Journal of Conflict Resolution* (AJCR) has the highest average number of citations with 4.91 average citations, followed by the *SA Crime Quarterly* (SACQ) with 3.36 average citations. This is despite the fact that these two journals have the lesser number of papers as compared to the other journals ranked, which have more papers or articles than the two. The two journals are also the second newest journals on the list, after the South African Journal of Bioethics and Law, whereas, the oldest journal (*South African Law Journal* / SALJ) in the list is ninth ranked. Schulze (2013) remarks that ‘because of the proliferation of new legal journals in South Africa, older legal periodicals no longer dominate the South African legal periodicals scene in the way they did for six decades ago.’ Lowe and Wallace (2011) acknowledge that ‘law journal article authors or scholars are more much likely to cite recent articles, than old ones and further that in the first five years after publication, the article is likely to receive twice

as many citations as it would do than in the next five-year period’.

This is similar to the ranking of legal journals by Maru (1976) who reports that out of 149 American law school journals that were evaluated, 33% of the citations were to materials not over two years old, 24% to materials 3 – 5 years old, 19% to 6 – 10 year old legal journal, 15% and 9% respectively to materials that were 11 – 20 years and over 20 years old. Ayres and Vars (2000) also hypothesise that recent scholarship will be cited more than older work.

The results in Table 1 also show that the two top ranked journals, published by non-governmental bodies are used more than the ones that are published under the auspices of law schools or universities. AJCR is published by the African Centre for the Constructive Resolution of Disputes (ACCORD), and SACQ by the Institute for Security Studies (ISS). The publishers of journals that were evaluated. Therefore, it is not surprising for Lowe and Wallace (2011) to identify the publisher as one of the variables that affect the likelihood of citation impact. In the ranking of legal journals conducted by Mann (1986), it was also discovered that non-law school journals perform better than law school affiliated law journals in terms of citation frequency. The other noteworthy factor about AJCR and SACQ is that they specialise in African conflict resolution and management as well as criminal law and justice, respectively. Therefore, the impact of subject matter on citation frequency can also be a determinant as Scott (2003) and Lowe and Wallace (2011) have also discovered.

The last and important notable discovery of this ranking relates to the mode of access to these law journals. Almost all the journals that are top of the list are accessible through open access platforms. The sixth placed *Potchefstroom Electronic Law Journal* (PELJ) is reputed to be the first legal journal to adopt open access in South Africa (Schulze 2013), and is freely accessible through the Southern African Legal Information Institute (SAFLII), with *Law, Democracy and Development Journal*. Other journals such as *African Human Rights Law Journal* (AHRLJ) and the *South African Human Rights Law Journal* (SAHRLJ) are accessible from the website of Faculty of Law, University of Pretoria. By implication, the ease of access to law journals increases the chances of citations to law reviews and articles. Research has also shown that articles available on open access platforms are cited more often than those not on open access (Donovan and Watson 2011).



**Table 1: Scholarly Citation of SA Law Journals**

Rank	Name of Journal	Publisher	Papers	Citations	Average Citations per paper	Age in Years
1	<i>African Journal of Conflict Resolution</i>	African Centre for the Constructive Resolution of Disputes (ACCORD)	268	1268	4.91	12
2	<i>SA Crime Quarterly</i>	Institute for Security Studies (ISS)	98	329	3.36	12
3	<i>TydskrifvirHedendaagse Romeins-HollandseReg</i>	University of Pretoria Faculty of Law	122	323	2.65	73
4	<i>African Human Rights Law Journal</i>	University of Pretoria Centre for Human Rights	323	726	2.25	20
5	<i>Law, Democracy and Development</i>	University of Western Cape Faculty of Law	71	172	2.24	19
6	<i>Potchefstroom Electronic Law Journal</i>	University of North-West Faculty of Law	193	395	2.05	18
7	<i>South African Journal on Human Rights</i>	Wits University Centre of Applied Legal Studies	408	759	1.86	31
8	<i>South African Journal of Bioethics and Law</i>	South African Medical Association	205	375	1.83	8
9	<i>South African Law Journal</i>	Juta publishers	486	847	1.74	109
10	<i>Annual Survey of South African Law</i>	University of South African Centre for Business Law	23	33	1.43	56
11	<i>SA Public Law</i>	Butterworths Publishers	248	331	1.33	30
12	<i>Journal of Judicial Science</i>	University of the Free State Faculty of Law	183	239	1.31	34
13	<i>De Jure</i>	University of Pretoria Faculty of Law	198	213	1.08	24
14	<i>Obiter</i>	University of Port Elizabeth Faculty of Law	597	547	0.92	80
15	<i>Stellenbosch Law Review</i>	University of Stellenbosch Faculty of Law	228	201	0.88	24
16	<i>Comparative and International Law in SA</i>	UNISA Institute of Foreign and of Comparative	1000	640	0.64	48
17	<i>ActaCriminologica</i>	Criminological and Victimological Society of Southern Africa (CRIMSA)	54	13	0.62	21
18	<i>South African Journal of Criminal Justice</i>	Juta Law	149	93	0.62	27
19	<i>ActaJuridica</i>	University of Cape Town Faculty of Law	61	14	0.23	58
20	<i>Fundamina: Journal of Legal History</i>	UNISA Faculty of Law	294	61	0.21	13
21	<i>Tydskrifvir die SuidAfrikaanseReg</i>	University of Johannesburg Faculty of Law	555	50	0.01	24

## Judicial Citations

All the journals that were evaluated for scholarly citations were also included in the list for judicial citation evaluation as shown in Table 2. These results are also arranged according to the average number of judicial citations accomplished by each journal title, from the highest to the lowest number. These were generated by dividing the number of citations by the number of articles or papers published in each journal evaluated (Eisenberg and Wells 2014).

The results show that the most heavily cited journal in the judicial opinions in South Africa was *Annual Survey of South African Law* (ASSAL) with 9.4 average citations. Schulze (2013) describes the ASSAL as the annual review of the South African law which provides an exhaustive overview by recognised judicial experts and commentators in their fields, and further as an all-encompassing encyclopaedia of legal developments in South Africa during any particular year. Perhaps that makes it to

be one of the sought after legal journal by judicial experts in South Africa. The *Tydskrifvir Hedendaagse Romeins-Hollandse Reg* (THRHR), which is the second oldest journal in South Africa, is ranked number two with 5.05 average citations, followed by *Acta Juridica* which was third ranked legal journal in judicial opinions with 3.88 average citations. The *South African Law Journal*, which is the oldest legal journal in South Africa, is ranked number four with the citation average of 0.68.

At the bottom of table is the 48-year-old *Comparative and International Law in Southern Africa* (CILSA) with no citations, but with more than a thousand papers or articles. Probably, the reason for lack of judicial citations for this journal, despite having the largest number of articles, is that it provides mainly reviews of legal developments in countries such as Lesotho, Namibia, Swaziland, Zambia, and Zimbabwe. The most cited journals in legal scholarship, that is, AJCR and SACQ, also have no citations in the judicial opinions.

**Table 2: Judicial Citations**

Rank	Name of Journal	Papers	Judicial citations	Average citations per paper	Age in years
1	Annual Survey of South African Law	23	208	9.04	56
2	Tydskrifvir Hedendaagse Romeins-Hollandse Reg	122	617	5.05	73
3	Acta Juridica	61	237	3.88	58
4	South African Law Journal	486	332	0.68	109
5	Stellenbosch Law Review	228	71	0.31	24
6	De Jure	198	63	0.31	24
7	SA Public Law	248	37	0.14	30
8	South African Journal of Criminal Justice	149	15	0.1	27
9	South African Journal on Human Rights	408	37	0.09	31
10	Tydskrifvir die Suid Afrikaanse Reg	555	34	0.06	24
11	Journal of Juridical Science	183	12	0.06	34
12	Fundamina: Journal of Legal History	294	9	0.03	13
13	Acta Criminologica	54	2	0.03	21
14	Law, Democracy and Development	71	8	0.01	19
15	Obiter	597	8	0.01	80
16	African Human Rights Law Journal	323	6	0.01	20
17	African Journal of Conflict Resolution	268	0	0	12
18	SA Crime Quarterly	98	0	0	12
19	Potchefstroom Electronic Law Journal	193	0	0	18
20	South African Journal of Bioethics and Law	205	0	0	0
21	Comparative and International Law in Southern Africa	1000+	0	0	48

Out of twenty-one journals that were evaluated fifteen (71%) were in one way or another cited, whereas six (29%) journals were never cited in the judicial rulings. When looking at the ages of the journals that were never cited in judicial decisions, it was discovered that they had been in existence not for more than twelve years. These findings show that the oldest legal journal content was cited more frequently in the judicial publications, than the new ones. Pierce and Reuben (2010) argue that there is a decline in the use of modern legal scholarship by U.S.A courts. Crespi (2004) and Peters (1981) have also long predicted a decline in the number of judicial citations for law reviews from the top three international journals such as *Yale Law Review* (YLR), *Harvard Law Review* (HLR) and *Stanford Law Review* (SLR). This shows that that modern legal scholarship is becoming more disconnected from the practical legal concerns, and it is of less relevance to the legal practitioners and judges (Crespi (2004). Perhaps this is the same situation with the South African legal journals' content. The South African courts are gradually ignoring legal scholarship that appears in law journals. Pierce and Reuben (2010) write:

One of the reasons for apparent decline in judicial reliance on law journals is the emergence of the internet where most judges have easy and instant access to case law. Law reviews used to serve as easy research tools for judges, and now that the case easily accessible, it makes sense to for a judge to cut the middle man out of the research process.

## Conclusion

This study has revealed variations in citation frequency with regard to scholarly and judicial impact of South African legal journals. Legal journals that are highly cited in legal scholarship are least cited in judicial opinions, and those that are cited highly in judicial opinions or law reports are least cited in legal scholarship. Scholarly citations are made up of journal articles that appear in relatively new journals, while judicial citations are made up of those that appear in journals that have been in existence for a long time. Furthermore, journals that are cited more

frequently in legal scholarship have specific focus in the field of law, and are affiliated to non-governmental organisations rather than to law schools, while those that are frequently cited in judicial decisions are legal in nature and are affiliated to law schools. It has also been shown that South African legal journals that are published through open access platforms are more cited by legal scholars and researchers than those that have not adopted these platforms. Open access legal journals are not cited most frequently in judicial opinions. Therefore, it is concluded that variables that serve as determinants of citation frequencies for South African legal journals have been identified as the age of the journal, mode access to the journal, its subject matter and its affiliation.

This study only looked at the citation frequency of legal journals, without paying attention to the specific articles and authors that have been cited more frequently. Consequently, in order to determine how articles and authors contribute to legal developments and judicial science in South Africa, further research can focus on the most heavily cited articles or authors.

## References

- Adriaanse, L. S. and Rensleigh, C. (2011). Comparing Web of Science, Scopus and Google Scholar from an Environmental Science Perspective. *South African Journal of Libraries and Information Science*, 77 (1): 169-178.
- Ayres, I. and Vars, F. E. (2000). Determinants of Citations to Articles in Elite Law Reviews. *The Journal of Legal Studies*, 29 (S1), 427-450.
- Brophy, A. L. (2007). The Emerging Importance of Law Review Rankings for Law School Ranking, 2003 - 2007. *University of Colorado Law Review*, 78, 35-52.
- Brown, K. C. (2002). How Many Copies Are Enough? Using Citation Studies to Limit Journal Holdings. *Law Library Journal*, 94 (2), 301-314.
- Chen, J. M. (2006). *Modelling Citations and Download Data in Legal Scholarship*.

- Minnesota Legal Studies Research Paper No. 06-25*. [Online] Available At [Http://Papers.Ssrn.Com/Sol3/Papers. Cfm? Abstract Id=905316](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=905316)(Accessed On 18 March 2016).
- Crespi, G. S. (2004). Judicial and Law Review Citation Frequencies for Articles Published in Different “Tiers” of Law Journals: An Empirical Analysis. *Santa Clara Law Review*, 44 (3), 897–959.
- Dendy, M. (2000). Starting and Building a New Law Library. *Advocate*, 23–26.
- Doleres, K. (2002). In Praise of Law Review. In: Pierce, W. D. and Reuben A. E. 2010. The Law Review is Dead; Long Live the Law Review: A Closer Look at the Declining Judicial Citation of Legal Scholarship. *Wake Forest Law Review*, 45, 1185–1226.
- Donovan, J. M. and Watson, C. A. (2011). Citation Advantage of Open Access Scholarship. *Law Library Journal*, 103 (4): 553 – 573
- Einsenberg, T. and Wells, M. T. (2014). Ranking Law Journals and the Limits of Journal Citation Reports. *Economic Inquiry*, 52 (4), 1301–1314.
- George, T. E. (2006). An Empirical Study of Empirical Legal Scholarship: The Top Law Schools. *Indiana Law Journal*, 81, 141–161.
- Gilmore, S. A. 2010. *PULP Guide: Finding Legal Information in South Africa*. Pretoria: Pretoria University Law Press. [Online] Available At: [Http://Www.Pulp.Up.Ac.Za/Pdf/2010\\_05/2010\\_05.Pdf](http://www.pulp.up.ac.za/pdf/2010_05/2010_05.pdf) (Accessed On 12 December 2015).
- Golderman, G. and Connolly, B. (2007). Who Cited This? *Library Journal Of Net Connect*. Winter: 18.
- Jennings, W. G., Higgins, G. E. and Khey, D. N. (2009). Exploring The Stability and Variability of Impact Factors and Associated Rankings in Criminology and Criminal Justice Journals, 1998–2007. *Journal of Criminal Justice Education*, 20 (2), 157–172.
- Kopf, R. G. (1997). Do Judges Read Review? A Citation-Counting Study of the Nebraska Law Review and Nebraska Supreme Court–1972–1996. *Nebraska Law Review*, 79, 708–780.
- Liebler, R. and Liebert, J. (2013). Something Rotten in the State of Legal Citation: The Life Span of A United State Supreme Court Citation Containing An Internet Link (1996-2010), *Yale Journal of Law and Technology*, 15 (2): 273 311.
- Lowe, M. S. and Wallace, K. L. (2011). Heinonline and Law Review Citation Patterns. *Law Library Law Journal*, 103, (1), 55–70.
- Mann, R. A. (1986). The Use of Legal Periodicals by Courts and Journals. *Jurimetrics*, Vol. 26 (4), 400–420.
- Martin, P. W. (2015). *Introduction to Basic Legal Citation*. [Online] Available At: [Http://Www.Access-To-Law.Com/772BE689-990C-44CC- A45F-A8AB1548AA21/Finaldownload/Downloadid-14AD14EFECC83 D 21BE896D BBE73E6031/772BE689-990C-44CC-A45F-A 8 A B 1 5 4 8 A A 2 1 / C i t a t i o n / B a s i c \\_ L e g a l \\_ C i t a t i o n . P d f](http://www.access-to-law.com/772BE689-990C-44CC-A45F-A8AB1548AA21/Finaldownload/Downloadid-14AD14EFECC83_D_21BE896DBBE73E6031/772BE689-990C-44CC-A45F-A8AB1548AA21/Citation/Basic_Legal_Citation.Pdf) (Accessed On 22 February 2016).
- Maru, O. (1976). Measuring the Impact of Legal Periodicals. *American Bar Foundation Research Journal*, 1 (1), 227–249.
- Mccormick, P. (1996). Judges, Journals and Exegesis: Judicial Leadership and Academic Scholarship [Comments]. *University of New Brunswick Law Journal*, 45: 139 – 148.
- Mcmahon, P. (2001). Canadian Judicial Citations of Articles Published in the University of Toronto Faculty of Law Review. *University of Toronto Faculty of Law Review*, 59: 367 – 408.
- Merrit, D. J. and Putnam, M. (1995-1996). Judges and Scholars: Do Courts and Scholarly Journals Cite the Same Law Review Articles. *Chicago-Kentucky Law Review*, 71: 871
- Ministry of Higher Education, Republic of South Africa. (2003). *Policy and Procedure for Measurement of Research Output for Higher Education Institutions*. [Online] Available at: [Http](http://www.mhe.gov.za) (2008). A Bibliometric Profile of Law Journals in South Africa. *De Jure*, 596 – 615.
- National Research Foundation. (2014). Considerable International Recognition: A Guide for NRF Specialist Committees and Assessment Panels.

- Evaluations And Rating [Online] Available at: [Http://Www.Nrf.Ac.Za/Sites/Default/Files/Documents/Considerable% 20International % 20Recognition\\_Aug%202014.Pdf](http://www.nrf.ac.za/sites/default/files/documents/considerable%20international%20recognition_aug%202014.pdf) (Accessed 25 May 2014).
- Obuh, A. O., and Babatope, I. S. (2011). Students' Citation Behaviour in Delta State University, Abraka, Nigeria. *Library Philosophy and Practice*. [Online] Available At: [Http://Unllib.Unl.Edu/LPP/Obuh-Babatope. Htm](http://unllib.unl.edu/lpp/obuh-babatope.htm)(Accessed On 13 September 2012).
- Ogden, P. J. (1993). Mastering the Lawless Science of Our Law: A Story of Legal Citation Indexes. *Law Library Journal*, 85 (1), 1–48.
- Peters, E. A. (1981). Reality and the Language of the Law. *Yale Law Journal*. 90:1193.
- Pierce, W. D. and Reuben A . E. (2010). The Law Review Is Dead; Long Live the Law Review: A Closer Look at the Declining Judicial Citation of Legal Scholarship. *Wake Forest Law Review*. 45, 1185–1226.
- Pretoria University Law Press. (2013). *PULP Guide: Where to Publish Articles on Law*. 2<sup>nd</sup> Edition. Pretoria: Pretoria University Law Press. [Online] Available At: [Http://Www. Pulp.Up.Ac.Za /Pdf/2013\\_01/2013\\_01.Pdf](http://www.pulp.up.ac.za/Pdf/2013_01/2013_01.pdf) (Accessed 29 January 2016).
- Posner, R. A. (2000). An Economic Analysis of the Use of Citations in the Law. *American Law And Economic Review*, 2 (2), 381–406.
- Ramsay, I. and Stapledon, G. P. (1997). A Citation Analysis of Australian Law Journals. *Melbourne University Law Review*, 21: 676–692.
- Ramsay, I. and Stapledon, G. P. (1998). The Influence of Commercial Law Journals: Citation Analysis. *Australian Business Law Review*, 26: 298–302.
- SABINET Online Ltd. 2016. *Law*. [Online] Available at: [Http://Reference.Sabinet.Co.Za/Prodejc/Journalcollectionlist?Collection\\_Id=9](http://reference.sabinet.co.za/prodejc/journalcollectionlist?collection_id=9) (Accessed On 18 January 2016).
- Schulze, W.G. 2013. A Conspectus of South African Legal Periodicals: Past And Present. *Fundamina: A Journal of Legal History*, 19 (1), 61–84.
- Scott, D. (2003). A Comparative Analysis of Seven Mid-South Law Reviews. *Legal References Services Quarterly*. 22(2/3), 99–112.
- Scott, F. (1989). The Most Frequently Cited Law Reviews and Legal Periodicals. *Legal Reference Services Quarterly*, 9 (3/4), 227–240.
- Shapiro, F. R. (1985). The Most-Cited Law Review Articles. *California Law Review*, 73, 1540–1554.
- Shapiro, F. R. (1992). Origins of Bibliometrics, Citation Indexing and Citation Analysis: The Neglected Legal Literature. *Journal of the American Society for Information Science*, 43 (5), 337–339.
- Shapiro, F. R. (2000). The Most – Cited Law Reviews. *The Journal of Legal Studies*, 29, (S1), 389–396.
- Shapiro, F. R. and Pearse, M. (2012). Most Cited Law Review Articles of all Time. *Michigan Law Review*, 110 (8), 1483–1520.
- Svantesson, D. J. B. (2009). International Ranking of Law Journals- Can it be Done and at What Cost? *Legal Studies*, 29 (4), 678–691.
- Thelwall, M. (2002) Research Note: In Praise of Google: Finding Law Journal Web Sites. *Online Information Review*, 26 (4):27–272.
- Thompson Reuters Inc. (2014). *Social Science Citation Index*. [Online] Available At: [Http://Thomsonreuters.Com/En/Products-Services/Scholarly-Scientific-Research/Scholarly-Search-And-Discovery/Social-Sciences-Citation-Index.Html](http://thomsonreuters.com/en/products-services/scholarly-scientific-research/scholarly-search-and-discovery/social-sciences-citation-index.html)(Accessed On 17 February 2016).
- Tintle, S. (2007). The Burden of Authority Anxiety. *Duke Law Journal*, Vol. 57(2) 487–516.
- Trautman, L. J. (2014). *The Value of Legal Writing, Law Review and Publication*. [Online] Available At: [Http://Papers.Ssrn.Com/Sol3/Papers.Cfm?Abstract\\_Id=2501834](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2501834) (Accessed On 05 April 2016).

**Solomon Bopape** is Senior Lecturer and Co-ordinator of the Programme of Information Studies at the University of Limpopo, in the Faculty of Humanities, School of Languages and Communication Studies – Department of Media, Communication and Information Studies.



# An Assessment of the Cyber Presence of Academic Libraries in Nigeria

**Toluwase Asubiaro**

*E. Latunde Odeku Medical Library  
College of Medicine  
University of Ibadan, Nigeria  
toluwaase@gmail.com*

## Abstract

*This webometric study provides an assessment of the web presence of academic libraries in Nigeria. The research work considered all the 129 accredited universities in Nigeria on National University Commission (NUC) website. Links to libraries on the homepages of the universities were searched. Google search engine was used for counting the webpages and in-links to the available libraries' websites. Webometric Analyst software was used for generating the most targeted top level domains and link analysis of the websites. Findings showed that more than 50% of the academic libraries did not have websites. Also, academic libraries can be accessed from the homepages of 42% of the universities in Nigeria. There was an average of 20,203.47 webpages, 5.21 in links and 0.000258 web impact factors per academic library. Though most of the academic libraries that had websites are old and owned by the federal government, the private university libraries' websites had more webpages than others. Generally, the web impact factors of the academic websites were negligible, which suggests that the academic libraries did not have useful information and innovation on their websites. The most targeted top level domains were .com (58.7%), followed by .org (12.4%), and the link network diagram shows that the libraries did not exchange information online.*

*It is recommended that academic libraries in Nigeria should form a consortium that will manage the development and standardisation of their websites of academic libraries.*

**Keywords:** Academic library websites, Academic libraries, Nigerian universities, World wide web, Webometric analysis

## Introduction

The study of the adoption, use and exploitation of information, information technologies and innovations is a major research interest in information science. The World Wide Web (www) or the web is one of the most profound information innovations and technologies that have attracted significant research interest in this regard. Webometrics is the sub-discipline which applies quantitative methods in studying the use, relationship, impact, evolution, presence and construction of information, information resources, structures and technologies on the web (Thewall, 2012). Webometric studies such as Jalal, Biswas, and Mukhopadhyay, (2010), Jeysanka and Badu, (2009), Nwagwu and Agarin, (2008), Jeyashree, Ravichandran, and others, (2015) employed developed metrics for assessing the presence, quality, quantity, usefulness, impact, evolution of any piece of information and its relationship with other pieces of information disseminated on the web. Webometric research also studies the size of the web, parts or bits of the web and comparison of webpages or websites, based on predetermined underlying features such as visibility, accessibility, and technologies (Baka and Leyni, 2015). Information dissemination is made possible on the Internet through the webpages, which is the major basic unit of webometric analysis.

The web as the information superhighway and the largest library (though filled with information, misinformation and disinformation) is a public space where information, largely without censorship can be disseminated from anywhere by anyone. Libraries exploit and employ the technologies and features of the web for performing their duties, and it provides alternative means of reaching their patrons. With the digitisation of library print resources and production of born digital library resources, the web provides the infrastructure, technology and means for storing, dissemination, retrieval, archiving and preserving these electronic resources.

One of the information divides is the adoption and use of the web. For instance, while universities and academic libraries in some regions of the world are well represented on the web, studies such as Nwagwu and Agarin (2008), reported that some universities in Nigeria do not have websites. World webometric ranking of universities and institutional repositories also provides some insight into information divide, as universities from certain regions of the world are highly ranked while universities from other regions are poorly ranked. Academic libraries in Nigeria are characterised by poor funding, poorly trained staff, understaffing, poor structural and in conducive physical spaces, poor power supply to physical libraries and poor internet services (Nok, 2006; Abubakar, 2011; Ogunsola, 2004; Ibinnaiye, 2012; Jibia, Mubaraka; Jirgi, 2013; and Eze, Jacintha and Uzoigwe, 2013). This conclusion cannot be made of the presence and performance of the libraries on the Internet since studies about the webometric performance of academic libraries in Nigeria have not been populated. Two earlier studies which are on academic libraries in Nigeria have concentrated on the analysis of content and physical features. The first, (Mohammed, Garba, and Umar 2014) in which 10 universities were sampled, concentrated on e-resources and other physical features of the websites. The second study, (Gbaje and Kotso, 2014), also assessed the contents of the library websites of the federal universities in Nigeria.

This study aims at finding out the following:

- (i) number of academic libraries in Nigeria that have websites;
- (ii) availability of library links in university homepages;
- (iii) visibility of academic libraries on the Internet;
- (iv) web impact factor of academic libraries on the Internet; and
- (v) relationship that exists among the libraries on the Internet.

### **Library and the Web**

The web provides an alternative platform for academic libraries to provide services to their patrons. The web is the largest library and it attracts the largest access. In this digital age, the web and computing technologies are library infrastructure for library activities. The web provides global access to library content. Considering this feature, universities make learning and library resources available online for distance learning students that could have otherwise found the library accessible because of distance. Overdrive is one of the online libraries that is exploiting the features of the internet effectively. It had traffic of over 1.6 billion visits to its website by 2011; and in 2012 alone, it attracted 6.26 million visits with 134 million checkouts of digital materials (Ewing, 2015). There are other features of the web and other information technologies that libraries exploit. For instance, Blummer (2008) claimed that libraries use e-books as an alternative for reducing cost of acquisition, maintenance and dissemination while the goal of easy information retrieval and access and collection development is achieved. The websites and the social platforms of libraries are used as marketing tools (Nooshinfard and Ziaei, 2011; Kaur, 2009; Ikonne, Onuoha, and Madukoma, 2013; Agha, 2004; Alkindi and Al-Suqri, 2013; Chan, 2012; (Schmidt, 2004; Siddike, Munshi, and Mahamud, 2013) as library products, services and resources are marketed to patrons and prospective patrons.

Studies have indicated that most library patrons prefer the online platforms for accessing library services (Omeluzor, Bamidele, Onuoha, and Alarape, 2013) while others either prefer electronic resources (Salleh and Alwi, 2014; Cumaoglu, Sacici, and Torun, 2013; Sharma, 2009) or they consider the electronic resources good alternatives to the print version (Woody, Daniel, and Baker, 2010; Idiegbeyan-Ose, Ilo, Ohaegbulam, 2015; Tosun, 2014). With the



increasing preference for electronic resources by library users, the academic library websites have provided a gateway to the libraries, their electronic catalogues and resources on the internet and sometimes the Intranet.

Most libraries have Internet centres for attracting a section of their patrons because Internet services are now regarded as a special and important library service to many patrons. Zickuhr, Rainie, and Purcell (2013) revealed that 77% of American library users above age 15 consider free Internet access is an important library service. Also, public libraries in the US that provide Internet access services, serve as bridges between the citizens and the e-government services, as well as means of communicating with the government during emergency (Bertot, Jaeger, Langa, and McClure, 2006).

### **Library Websites**

Library websites have attracted a lot of interest in the research arena. Even basic activities such as development of academic libraries are not left out as studies such as Lwoga (2014) and Hilyer(2009) have carried out studies on user-centered library website designs. Other research such as Konnur, Rajani and Madhusudhan(2010), Gbaje and Kotso(2014), Mohammed et al., (2014), Chua and Goh, (2010) and Hazidah, Awang and Abidin, (2013) have focused on the content, resources, architecture and technologies on library websites. There are studies which have considered use and adoption of library websites by users such as Augustine and Greene (2002), Kim (2011a) and Kim(2011b). Other studies such as Nooshinfard and Ziaei (2011) have concentrated on the use of websites by libraries for marketing of information resources and services.

Onyancha (2007) carried out a webometric analysis of academic library websites in Eastern and Southern African countries. The study aimed at investigating the accessibility to the library websites from the university websites, the availability of some popular electronic services, the size of the websites, the number of in links, the web impact of the websites, and the online interaction of the websites.

### **Methodology**

A sample survey design was adopted to study websites of academic libraries in Nigerian universities. Sampling frame which contained a list of all approved federal, state and private universities was collected from the website of National Universities Commission (NUC) on the 4th of March, 2015. There were 40 federal, 50 private and 39 state universities, making a total of 129 universities in Nigeria. All the universities were considered for this research work.

The first level of data collection with the aim of assessing the access points to the websites of the libraries on the university websites involved all the universities in the sampling frame that have functional websites. The websites of the universities were searched and checked for library links between the 1st and 13th of March, 2015. Two steps were taken to obtain the website addresses of universities. First, the links provided on the NUC website provided access to the functional websites of some of the universities. Non-functional links to universities' websites on the NUC website were noted. Some links were non-functional because the web addresses were probably wrongly spelt, offline or never existed. The second step taken to obtain the website addresses of all the universities was that for all the universities whose links on NUC website were not functional, their names were searched on the www, using the Google search engine. The search for websites of universities whose weblinks on NUC website were non-functional was conducted within a week. Universities whose domain had expired, or whose webpages were non-functional because they were under construction were not considered for the second level of analysis.

The second level of analysis involved the assessment of the links to academic library websites on the university websites. The menu and the other hyperlinks on the homepage of the university websites were checked for links to the library website. If links indicating "library", "university library" or "library services" were not found, links indicating OPAC, e-library, library management system, e-resources and e-books were also considered as library links. There were two types of results in this category: first,

university websites with functional library links and second, university websites without functional library links or websites. An academic library is considered not to have a functional library website or webpages if the:

- i. university websites do not have a library link,
- ii. library links opens pages that are under construction,
- iii. library links opens pages that are empty,
- iv. library link is not working,
- v. link opens the home page of the university website,
- vi. library home page is not accessible to the public because it requires login details and,
- vii. library link does not provide information about the library.

Google search engine was further used to search for academic libraries that have links on the websites of their universities, this was done to collect data about libraries that maintain more than one website. Also, on the host institutional website, if a library had no link or a non-functional link, the Internet was searched for such library using Google search engine. This was done to make sure that libraries that created websites independently of or without links from their host institution's websites are not erroneously recorded as not to possessing a website.

For this research, a library was considered to have a website if its website is a sub-domain under the university domain. For instance, [www.ui.edu.ng](http://www.ui.edu.ng) is the University of Ibadan website address or domain name whereas <http://library.ui.edu.ng/> which is one of its subdomains is the website address of the University of Ibadan library. A library is also considered to have a website, even if the domain name is different from the university's domain name. For instance, [www.nou.edu.ng](http://www.nou.edu.ng) is the domain name or website address of the National Open University of Nigeria (NOUN), while [www.nounlibrary.com.ng](http://www.nounlibrary.com.ng) is the domain name or website address of the National Open University of Nigeria Library.

The third level of analysis was performed with the use of Google search engine's features for

collecting data about number of web pages and the in-links. "info:name of website" query was entered into the Google search engine. This search was conducted in March, 2015.

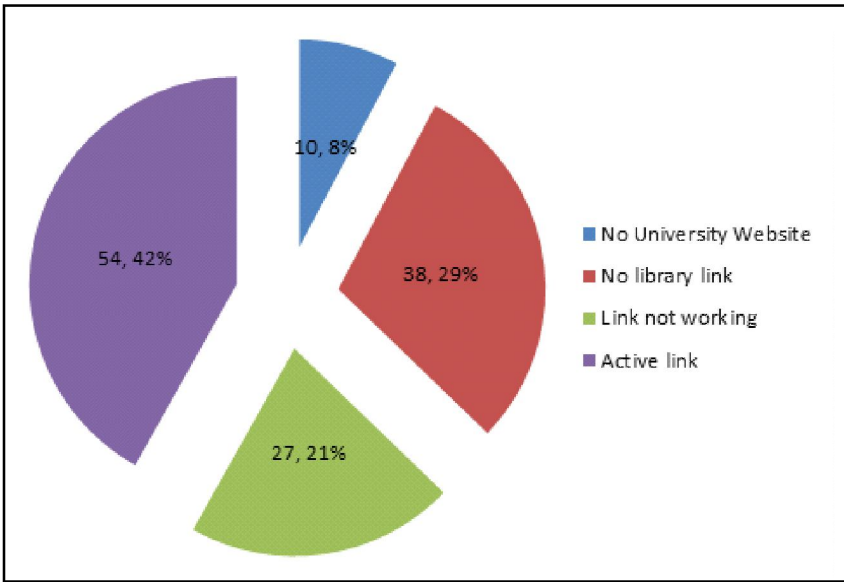
The fourth level of data collection was done using the Webometric Analyst 2.0 for link impact report and link analysis between the websites. Data collection was also done in March 2015. Information about web impact factor (WIF) was obtained by dividing the number of in-links by total number of web pages that were indexed by Google. WIF is a quantitative metric for ranking websites or top-level domains (Noruzi, 2006). In-links can be likened to citations to a document; a document is cited by another document when information from such the cited document is used; also a webpage or website receives an in-link from another website or webpage when information on the in-linked website or webpage is used. In another word, number of in-links can be likened to the citation count while WIF can be likened to journal impact factor (JIF). Therefore, WIF is a measure of the usefulness of a website or webpage. The formula for calculating WIF is given below:

$$WIF = \frac{\text{Total number of in - links into a given website}}{\text{Total number of web pages of a website indexed by Google}}$$

## Results

### Libraries Websites' Links from Host Universities' Homepages

The analysis of the presence of the libraries brought about the categorisation of the web presence of the academic libraries as presented in Figure 1. This study revealed different levels of presence of academic libraries on the Internet. First, parent universities of 8% of the academic libraries do not have websites at all, and academic libraries in this category do not host separate websites as confirmed by Google search engine. Less than a third (29%) of the universities in Nigeria did not have links to a library or other related websites such as library system, library catalogue, library management system, OPAC, e-books or e-library. Some have links to a library website (21%), but the links are either not working or they opened expired pages, pages under construction or empty pages. Academic libraries can be accessed from the homepages of 42% (54) of the universities in Nigeria.



**Figure 1: Categories of the Presence of Academic Libraries on the Web**

### **Academic Libraries with Websites**

There were 19 academic libraries that had websites based on the operational definition of a website in this research work. Out of the 19 academic libraries that had websites, 15 used sub-domain under the host institution domain name. There were thirteen federal, two state and four private universities that had at least a library website.

### **Size of the Websites of the Academic Libraries, In-Links and WIF**

While the number of web pages provides information about quantity only, the in-links provides information about impact and online quality of information provided on the website. Since library websites are

not expected to provide access to knowledge only, they are also expected to contain knowledge, in-links which provide information on ‘online quality of information’ contained in the website on the web were considered for analysis in this research. According to Table 1, eleven academic libraries’ websites did not have in-links and WIF. There was an average of 20,203.47 webpages, 5.21 in links and 0.000258 WIF per academic library. Most of the libraries that had websites are older and federal government owned. However, the private universities had larger websites. A little over half of the (52.63%) of the libraries had less than a hundred web pages. Only 21.05 % had more than a thousand web pages. The WIF of the libraries were very small. The University of Lagos had the highest WIF, followed by American University of Nigeria.

**Table 1: Academic Libraries, their web addresses, Number of Web pages, In-links and WIF**

	Name of University	Web address	Web pages	In-links	WIF
1	Federal University of Technology, Akure	<a href="http://lib.futa.edu.ng/">http://lib.futa.edu.ng/</a>	861	13	0.015
2	Obafemi Awolowo University	<a href="http://library.oauiife.edu.ng/">http://library.oauiife.edu.ng/</a>	27	0	0
3	University of Abuja	<a href="http://www.uniabujalibrary.net/">http://www.uniabujalibrary.net/</a>	16	0	0
4	University of Abeokuta	<a href="http://library.unaab.edu.ng/">http://library.unaab.edu.ng/</a>	81	1	0.012
5	University of Calabar	<a href="http://library.unical.edu.ng/">http://library.unical.edu.ng/</a>	17	0	0
6	University of Ibadan	<a href="http://library.ui.edu.ng/">http://library.ui.edu.ng/</a>	19,900	34	0.0017
7	University of Ilorin	<a href="http://www.library.unilorin.edu.ng">http://www.library.unilorin.edu.ng</a>	150	3	0.02
8	University of Lagos	<a href="http://library.unilag.edu.ng/">http://library.unilag.edu.ng/</a>	85	16	0.18
9	University of Port Harcourt	<a href="http://library.uniport.edu.ng/">http://library.uniport.edu.ng/</a>	209	7	0.033
10	Lagos State University	<a href="http://Lasulibrary.org">Lasulibrary.org</a>	61	0	0
11	Ondo State University of Science and Technology	<a href="http://library.osustech.edu.ng">library.osustech.edu.ng</a>	57	0	0
12	American University of Nigeria	<a href="http://library.aun.edu.ng/">http://library.aun.edu.ng/</a>	89	12	0.13
13	University of Osun	<a href="http://library.uniosun.edu.ng">library.uniosun.edu.ng</a>	152	8	0.052
14	Babcock University	<a href="http://library.babcock.edu.ng/">library.babcock.edu.ng/</a>	259,000	0	0
15*	Elizade University, Ilara-mokin	<a href="http://library.elizadeuniversity.edu.ng">http://library.elizadeuniversity.edu.ng</a>	96,000	5	0
16	National Open University	<a href="http://www.nounlibrary.com.ng/">www.nounlibrary.com.ng/</a>	263	0	0
17	Adeleke University, Ede	<a href="http://koha.adelekeuniversity.edu.ng/">koha.adelekeuniversity.edu.ng/</a>	6,850	0	0
18	OOU, Ago-Iwoye	<a href="http://library.ouoagoiwoye.edu.ng/">library.ouoagoiwoye.edu.ng/</a>	27	0	0
19	Michael Okpara University	<a href="http://www.mouaulibrary.com/">http://www.mouaulibrary.com/</a>	21	0	0
	Total		383866	99	

### Most Commonly Targeted Top Level Domains (TLD)

The types of websites that are referenced or linked by websites are categorised by type of top level domain (TLD). TLD refers to the highest hierarchy domain in the Domain Name System (DNS) on the internet. For instance, the TLD for [www.ui.edu.ng](http://www.ui.edu.ng)

is .ng while the TLD for [www.nounlibrary.com](http://www.nounlibrary.com) is .com. Targeted TLDs by the libraries refer to the TLDs that are out-linked by the library websites. Three academic libraries had no out links. Out-links refer to links on a given website to other websites. Majority of the targeted TLDs were .com domains (58.7%), followed by .org TLD (12.4%) as shown on Table 2 below.

**Table 2: Most Targeted TLDs by the Academic Library Websites**

Domain	Federal	State	Private	Total (%)
com	54	59	15	128 (58.7%)
org	20	0	9	29 (12.4%)
net	13	3	1	17 (7.5%)
edu	4	0	4	8 (2.5%)
de	6	1	1	8 (3%)
info	7	2	2	11 (3.5%)
co	2	1	1	4 (2%)
do	4	0	0	4 (2%)
se	1	1	1	3 (1.5%)
others	14	0	3	17 (8.4%)
	118	65	18	201

**Link Network Diagram**

Link analysis diagram in Figure 2 shows that there was no interaction between the academic libraries

online. This was generated with webometric analyst 2.0 that was designed by Mike (2012).



## Discussion of Findings

The first finding of this study which showed that more than 50% of academic libraries in Nigeria did not have presence on the Internet suggests that librarianship in Nigeria is far from maturity, gauche, and presents less innovation in information technological adoption and use. The web is a veritable tool for academic libraries in the digital age. Any academic library that does not have a presence on the Internet is left behind and not present on the world map of the information society; it therefore shows that academic libraries in Nigeria must keep pace with the world. Secondly, it shows that the university libraries were not exploiting in its fullest the features of the web. Thirdly, web savvy and technologically inclined researchers in these communities will be excluded in service provision by the academic libraries that did not have websites. Lastly, access to global research outputs in form of electronic journal articles and other resources is limited or not possible without functional academic library website.

One of the implications of making a library own webpages under the parent university's website as opposed to allowing it to operate and maintain a sub-domain under the university's domain name or operate and maintain an independent domain is that when the university website is hacked or crashed, the library website is hacked or crashed as well. Moreover, libraries cannot take certain decisions on the type of platform to host their websites or the type of securities they want to put in place for the digital intellectual properties of the libraries when they only own webpages on their universities' websites. Also, libraries cannot add pages, services, innovation or information to their websites without the bottlenecks of the university IT unit. Whereas, with an independent domain or sub-domain, a library can independently "run" in the digital world.

Out of the academic libraries that have websites, four libraries had websites that were not sub-domains or part of the universities' domain name. Academic libraries are expected to host websites that form part of the university's domain. There are advantages of doing this. First, it will contribute to the web impact of the university and second, locating such library websites will be easier.

Apart from this, websites of four academic

libraries were not accessible from the university homepage. Library websites are expected to be located at the homepage of the university website and at conspicuous locations, at least as a main menu item. One of the responsibilities of a university is knowledge creation, and the library manages the materials for knowledge production. Often, the wealth of resources in an academic library is a direct reflection of the intellectual state of its host institution. Moreover, in this digital age, the library is the custodian of knowledge produced by the university because the library manages university's institution repository which contains all forms of knowledge produced by the university and members of the university community. Since the library is central to knowledge production and it is very important to the university, it is expected that it should be centrally placed on the university website.

The WIF of the library websites which were negligible suggests that the library websites were not informative and innovative with ideas. WIF measures the usefulness of an information source on the Internet. This supports earlier studies such as (Gbaje and Kotso, 2014) and (Mohammed et al., 2014) which reported that librarianship in Nigeria is at infancy and that websites of academic libraries in Nigeria are presented as ordinary organisational website with very little inclination towards intricacies of academic library websites requirements. It further suggests that there is need to carry out content analysis of the academic library websites in Nigeria to investigate the quality of information literacy instructions on the websites; as this can provide information concerning the quality of information services provided on these websites.

The targeted domains by the library websites explains the type of information that are referenced by the libraries. It was revealed that the library websites did not target educational or academic (.edu, .ac) and government (.gov) domains, rather they targeted commercial domains (.com). This finding suggests that the information that are referenced on the websites are largely non-academic. This is a further reflection of the present practice in which academic libraries in Nigeria operate in isolation.

## Conclusion and Recommendations

In conclusion, this study revealed that most academic

libraries in Nigeria did not have websites. Only few academic libraries owned websites, which contain few webpages, very few in-links and out-links and negligible web impact factors or low quality information. Among the academic libraries, linked network analysis diagram revealed that there were no interactions.

It is therefore recommended that library websites should be hosted as sub-domain of the university web domain to encourage innovation, technological inclination and autonomy of the library. The address of a website speaks volume about its authority and purpose. Academic library websites that form part of the university's domain are more authoritative, and the purpose is conspicuous from its address. It is recommended that academic libraries in Nigeria should consider populating their websites with quality information literacy instructions, e-resources, marketing and links to the university's institutional repository and library services. An academic library website becomes more useful and used when it provides services such as library registration, interlibrary loans, research data management and booking for reading rooms through its websites. Videos instructions that can educate patrons on subjects like effective searching, academic misconducts, tour of the library, e-resources in the library, reference management and other library services are strongly recommended for library websites. Apart from quality content, institutional repositories, data repositories and research data repositories are services that could be provided by libraries on their website that can drive traffic, increase usefulness (in-links and WIF), enhance global visibility and webometric ranking of the universities. Academic libraries in Nigeria therefore have a major part to play in enhancing global visibility of Nigerian universities on the web, thereby improving their webometric rankings in the world.

It is also recommended that academic libraries in Nigeria should form a consortium that will manage the development and standardisation. The consortium will be advised by special interest groups of professional information scientists in the country. Also, the location of a link to library website on the homepage of the university website is recommended in accordance with Onyancha (2007) which

submitted that "a library whose website is hidden is as good as a library that does not have a website".

Academic libraries in Nigeria should strongly consider training librarians and information technology technical staff on academic library websites requirements and intricacies. Well trained librarians should be involved in the design, development and management of academic library websites for libraries than depend on the web managers of the university. As it was earlier noted that the academic libraries did not interact online, it is recommended that the consortium of academic libraries in Nigeria, if formed, should consider developing a modality for resource sharing and interlibrary loans of library materials among the academic libraries and patrons. This consortium can take cues from the South African's SABINET (Southern African Bibliographic Network) through which South African libraries have formed a consortium for interlibrary loan and resources sharing among other things.

One of the limitations of the study is that the most targeted websites by the websites of the academic libraries were not considered as a part of the research work. It is suggested that a consortium of libraries in Nigeria should be formed, which will specify and implement certain standards for library websites' development and design modalities for online resource sharing and interlibrary loans services among academic libraries.

## References

- Abubakar, B. M. (2011). Academic Libraries in Nigeria in the 21st Century. *Library Philosophy and Practice*, 2011. Retrieved from <http://www.webpages.uidaho.edu/~mbolin/abubakar.htm>
- Agha, S. S. (2004). Marketing Library Services Online: Strategies and Challenges for Academic Libraries. Retrieved from <http://repo.uum.edu.my/2310/>
- Alkindi, S. S. and Al-Suqri, M. N. (2013). Social Networking Sites as Marketing and Outreach Tools of Library and Information Services. *Global Journal of Human-Social Science Research*, 13(2). Retrieved from <http://socialscienceresearch.org/index.php/GJHSS/article/view/567>

- Augustine, S. and Greene, C. (2002). Discovering how Students Search a Library Web site: A Usability Case Study. *College and Research Libraries*, 63 (4), 354–365.
- Baka, A. B. A. and Leyni, N. (2015). Webometric Study of World Class Universities Websites. *Qualitative and Quantitative Methods in Libraries*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authType=crawler&jrnl=22411925&AN=101545926&dh=DxOXFFJSoP3XzKefCk64ktTGYsJyoRyaUNKf%2Bs3oxjVkb%2BIIdQ QhbTeZxG1N%2BxKfQP3pDXWFSfcUAUMLIBHZvQQ%3D%3D&crl=c>
- Bertot, J., Jaeger, P., Langa, L. and McClure, C. (2006). Public Access Computing and Internet Access in Public Libraries: The Role of public Libraries in E-government and EmerPency Situations. *First Monday*, 11 (9). Retrieved from <http://uncommonculture.org/ojs/index.php/fm/article/view/1392/1310>
- Blummer, B. (2008). The Adoption of Electronic Books by Special, Academic, and Public Libraries. *Internet Reference Services Quarterly*, 11 (2), 1–13. [http://doi.org/10.1300/J136v11n02\\_01](http://doi.org/10.1300/J136v11n02_01)
- Chan, C. (2012). Marketing the Academic Library with Online Social Network Advertising. *Library Management*, 33 (8/9), 479–489.
- Chua, A. Y. and Goh, D. H. (2010). A Study of Web 2.0 Applications in Library Websites. *Library and Information Science Research*, 32 (3), 203–211.
- Cumaoglu, G., Sacici, E. and Torun, K. (2013). E-book versus Printed Materials: Preferences of University Students. *Contemporary Educational Technology*, 4 (2), 121–135.
- Embassy, U.S. (2013, March 27). Nigerian Education Profile. Retrieved March 5, 2015, from [http://nigeria.usembassy.gov/nigeria\\_education\\_profile.html](http://nigeria.usembassy.gov/nigeria_education_profile.html)
- Ewing, S. (2015). eBook Use Up 33% in 2014 in Libraries through OverDrive. Retrieved from <http://company.overdrive.com/news/ebook-use-up-33-in-2014-in-libraries-through-overdrive/>
- Eze, Jacintha, U. and Uzoigwe, C. U. (2013). The Place of Academic Libraries in Nigerian University Education: contributing to the “Education for All” initiative., 5 (10), 432–438.
- Gbaje, E. S. and Kotso, J. A. (2014). Assessing the Contents of Nigeria Academic Library Website. In *Information and Knowledge Management* (Vol. 4, pp. 6–11). Retrieved from <http://www.iiste.org/Journals/index.php/IKM/article/view/14182>
- Hazidah Awang and Abidin, M. (2013). Web 2.0 on Academic Libraries in Southeast Asia. In *Proceedings of the IATUL Conferences, Paper 45*. Purdue University: Purdue University Libraries.
- Hilyer, L. A. (2009). User-Centred Library Websites: Usability Evaluation Methods. *The Journal of Academic Librarianship*, 5 (1), 101–102.
- Ibinnaiye, D. I. (2012). Challenges and Prospects of Digitization of Library Resources in Nigeria Universities: The Experience of Kashim Ibrahim Library. *European Journal of Globalization and Development Research*, 4 (1), 287–300.
- Idiegbeyan-Ose, J. Ilo, P. I., Ohaegbulam, H. C. (2015). An Investigation into Students’ Preference between Prints and Electronic Resources in Two Private University Libraries in Nigeria. *International Journal of Academic Library and Information Science*, 3 (3). Retrieved from <http://eprints.covenantuniversity.edu.ng/5189/>
- Ikonne, C. N., Onuoha, U. D. and Madukoma, E. (2013). Marketing of Information Services in the Social Media Framework of Communication. Retrieved from <http://www.vnmpublication.com/IJIRM/2013/10%20October/1.pdf>
- Jalal, S. K., Biswas, S. C. and Mukhopadhyay, P. (2010). Web Presence of Selected Asian Countries: A Webometric Study. *COLLNET Journal of Scientometrics and Information Management*, 4 (2), 57–68.
- Jeyashree, S. and Ravichandran, R., (2015). Web Impact Assessment of Identified Higher



- Education Institutions in India. *Annals of Library and Information Studies (ALIS)*, 62 (1), 7–18.
- Jeyshanka, R., and Badu, R. (2009). Websites of Universities in Tamil Nadu: a Webometric Study. *Annals of Library and Information Studies*, 56 (2), 69–79.
- Jibia, M. S., Mubarak, C. M. and Jirgi, I. M. (2013). Challenges and Prospects of Using Information Communication Technologies (ICTS) among Nigerian Polytechnic Libraries Reference Services. In *Information and Knowledge Management* (Vol. 3, pp. 1–6). Retrieved from <http://www.iiste.org/Journals/index.php/IKM/article/view/6233>
- Kaur, K. (2009). Marketing the Academic Library on the Web. *Library Management*, 30 (6/7), 454–468. <http://doi.org/10.1108/01435120910982140>
- Kim, Y.-M. (2011a). Users' Perceptions of University Library Websites: A unifying view. *Library and Information Science Research*, 33 (1), 63–72.
- Kim, Y.-M. (2011b). Why should I use University Library Website Resources? Discipline Differences. *The Journal of Academic Librarianship*, 37 (1), 9–18.
- Konnur, P. V., Rajani, S. and Madhusudhan, M. (2010). Academic Library Websites in Bangalore city, India: An Evaluative Study. Retrieved from <http://digitalcommons.unl.edu/libphilprac/408/>
- Lwoga, E. (2014). Integrating Web 2.0 into an Academic Library in Tanzania. *The Electronic Library*, 32 (2), 183–202.
- Mike, T. (2012). Webometric Analyst (Version 2.0). Webometric Analyst, Statistical Cybermetrics Research Group, University of Wolverhampton, UK. Retrieved from [lexiurl.wlv.ac.uk/](http://lexiurl.wlv.ac.uk/)
- Mohammed, A., Garba, A. and Umar, H. (2014). University Library Websites in Nigeria: An Analysis of Content. In *Information and Knowledge Management* (Vol. 4, pp. 16–22). Retrieved from <http://www.iiste.org/Journals/index.php/IKM/article/view/11510>
- National University Commission. (2015). National Universities Commission. Retrieved March 5, 2015, from <http://www.nuc.edu.ng/pages/universities.asp>
- Nok, G. (2006). The Challenges of Computerising a University Library in Nigeria/ : The Case of Kashim Ibrahim Library, Ahmadu Bello University, Zaria. *Library Philosophy and Practice*, 8 (2). Retrieved from <http://www.webpages.uidaho.edu/~mbolin/nok.htm>
- Nooshinfard, F., and Ziaei, S. (2011). Academic Library Websites as Marketing tools. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1631andcontext=libphilprac>
- Noruzi, A. (2006). The Web Impact Factor: A Critical Review. *The Electronic Library*, 24 (4), 490–500. <https://doi.org/10.1108/02640470610689188>
- Nwagwu, W. and Agarin, O. (2008). Nigerian University Websites: A Webometric Analysis. *Webology*, 5 (4), Article 62.
- Ogunsola, L. A. (2004). Nigerian University Libraries and the Challenges of Globalization: The Way Forward. *Electronic Journal of Academic and Special Librarianship*, 5 (2-3). Retrieved from [http://southernlibrarianship.icaap.org/content/v05n02/ogunsola\\_101.htm](http://southernlibrarianship.icaap.org/content/v05n02/ogunsola_101.htm)
- Omeluzor, S., Bamidele, I., Onuoha, U. and Alarape, A. (2013). Information Literacy Skills among Postgraduate Students of Babcock University, Nigeria. *International Journal of Innovative Research in Management*, 12 (2), 1–16.
- Onyancha, O. B. (2007). A Webometric Study of Selected Academic Libraries in Eastern and Southern Africa using a Link Analysis Approach. *South African Journal of Libraries and Information Science*, 73 (1), 25–39.
- Salleh, A. M. and Alwi, D. M. (2014). The Preference E-Book Versus Printed Material Reading Habits of Polytechnic Lecturers. In *Proceeding of the Global Summit on Education GSE 2014* (pp. 590–597). Kuala Lumpur, MALAYSIA: WorldConferences.net. Retrieved from [http://worldconferences.net/proceedings/gse2014/toc/papers\\_gse2014/g%20197%20-%20azura%20mohd%20](http://worldconferences.net/proceedings/gse2014/toc/papers_gse2014/g%20197%20-%20azura%20mohd%20)

- salleh\_the%20preference%20e-book%20versus%20printed%20\_read.pdf
- Schmidt, J. (2004). Marketing Library and Information Services in Australian Academic Libraries. *Marketing Library and Information Services: International Perspectives*, 120.
- Sharma, C. (2009). Use and Impact of E-resources at Guru Gobind Singh Indraprastha University (India): A Case Study. *Electronic Journal of Academic and Special Librarianship*, 10 (1). Retrieved from [http://southernlibrarianship.icaap.org/content/v10n01/sharma\\_c01.html](http://southernlibrarianship.icaap.org/content/v10n01/sharma_c01.html)
- Siddike, M. A. K. Munshi, M. N., and Mahamud, R. (2013). Marketing of Web-based Academic Library Services in Bangladesh. *International Journal of Library and Information Science*, 5 (10), 378–385.
- Thewall, M. (2012). A History of Webometrics. *Bulletin of American Society for Information Science and Technology*, August/September 2012.
- Tosun, N. (2014). A Study on Reading Printed Books or E-Books: Reasons for Student-Teachers Preferences. *Turkish Online Journal of Educational Technology-TOJET*, 13 (1), 21–28.
- Woody, W. D., Daniel, D. B., and Baker, C. A. (2010). E-books or Textbooks: Students Prefer Textbooks. *Computers and Education*, 55 (3), 945–948.
- Zickuhr, K., Rainie, L., and Purcell, K. (2013). Library Services in the Digital Age. Retrieved from <http://libraries.pewinternet.org/2013/01/22/library-services/>

**Toluwase AsubiARO** is a librarian at E. Latunde Odeku Medical Library, College of Medicine, University of Ibadan, Nigeria. He is currently on study leave to pursue a PhD in Library and Information Science at Faculty of Information and Media Studies, University of Western Ontario, Canada. He holds B. Sc. (Hons) in Mathematics and a M. Inf. Sc. in Information Science.



# Electronic Information Resource Sharing among University Libraries in Southern Nigeria: Opportunities and Challenges

**Harriet U. Igbo and Nwabuisi T. Imo**

*Nnamdi Azikiwe Library,  
University of Nigeria, Nsukka  
harriet.igbo@unn.edu.ng  
nwabuisit.imo@unn.edu.ng*

*that would drive effective consortium formation among libraries for a more effective resource sharing.*

**Key Words:** Electronic information resources, Electronic resource sharing, Access to information, University libraries.

## Abstract

*The study explored the state of electronic information resource sharing among university libraries in Southern part of Nigeria, highlighting the prospects and the challenges. The study was an empirical research which adopted the descriptive survey as the design. The questionnaire was used to collect data from the population comprising university librarians of the 37 public universities in Southern Nigeria. It was found that the university libraries had diverse kinds of electronic information resources and some ICT facilities but lacked web-based OPAC and library management software, which are fundamental for e-resource sharing. They could not engage in any meaningful form of structured resource sharing initiative as a result of lack of institutional policies and standards. This implies that access to information is endangered where the libraries are unable to collaborate to bridge the gap between the information-rich and information – poor libraries – a scenario which conversely would affect the relevance and image of the poor libraries. It was recommended that the management of the universities and the Nigerian Library Association should advocate for government support in formulating standard policies and development of standard software*

## Introduction

Experiences from the new information order have shown that a library's collection is no longer confined within the library's building, rather they are found across states, nations and the virtual information world epitomized by the World Wide Web. Perhaps, Calhoun (2006) had this in mind when he argued that libraries of the future will be evaluated based on their ability to provide their users with technologies that allow applications to communicate across platforms and programming languages using standard protocols based on Extensible Make-up languages (XML) to connect catalogues and other library resources to search engines, e-learning systems, portals, etc. This is in line with the opinion of Ejedafuru (2010) and Parent (2012), who, taking cognisance of the changes brought to bear on libraries by information communication technology (ICT) revolution, asserts that emphasis on today's library is on its effectiveness in providing universal access to information, rather than the traditional services which are no longer serving the needs of the users. Parent concluded that transformational and sometimes radical changes are required in order for libraries to adapt to changing conditions, as well as seize the opportunity to make greater positive impact on society. This change is epitomised in one of the basic functions of the library (resource sharing/library cooperation) which has been in practice through such activities as inter-library loan,

cooperative acquisition, cooperative cataloguing, cooperative resource s, etc.

Electronic Information Resource (EIR) sharing has been identified as the critical factor for effective functioning of libraries in this present ICT dispensation ( Kaul, 2001 and Manjunath and Shivalingaiah, 2003). This is complemented by the ownership of structures that will facilitate the process. The above assertion has a strong bearing on an earlier report made by the United States National Inquiry on Scholarly Communication in 1979. This report argued that research libraries can no longer function as autonomous entities each striving for self-sufficiency. This assertion is based on the fact that even in the years of rapidly expanding budgets, libraries find it difficult to achieve this goal. The report further identified two forms of resource sharing which have direct bearing in this era. These are the development of national collections accessible to all research libraries and the linking of libraries through computerised bibliographic networks into a national system. In the opinion of the authors, the resources that could be shared through the platforms could include e-books, e-journals, resources from online databases, e-reports, e-newspapers/magazines, government documents in electronic formats, electronic theses/dissertations and other ephemeral resources that exist in electronic formats. Engaging in e-resource sharing could provide libraries with a number of opportunities which are related to having easy access to global information by individual libraries; equal opportunities for contribution of a library's local content to the universal information pool, thereby showcasing the potentials of the libraries and their parent institutions globally and reducing the pressures on library budget on acquisition of print resources.

The foregoing shows that the report of the US National Inquiry on Scholarly Communication (1979) though dated is still apt and cannot be swept under the carpet, especially in developing countries such as Nigeria. This is more so as the identified two forms of electronic information resource sharing mechanisms presently do not exist in Nigerian university libraries. A pre-research survey made in these libraries show that the only existing form of resource sharing remains the traditional referral services whereby individual users make request through their institutional libraries to use the

resources available in other institutions. The National Universities Commission (NUC) is trying to make alternative arrangement through the recently commissioned Nigerian Research and Education Network (NgREN) which is supposed to be a consortium arrangement for providing e-resources and services for Nigerian tertiary education (Atah, 2014); it could be that the absence of a national network for resource sharing, individual libraries should strive to be part of the global information dissemination system by developing technological application that would enable them to exchange information with other systems in a networking platform using ICT. Hence this study is designed to ascertain the state of e-resource sharing among university libraries in Southern Nigeria.

### Research Questions

This research is designed to examine the following questions:

- What are the types of e-information resources available in the university libraries?
- What ICT facilities are available for e-resource sharing in the university libraries?
- What are the modes of access provision of e-resources to users through e-resource sharing?
- What is the extent of providing access to information resources through e-resource sharing?
- What challenges are encountered by the university libraries in e-resource sharing?
- What strategies are to be put in place for enhancing e-resource sharing in university libraries?

### Review of Literature

Electronic information resources (EIR) have been variously defined by Harridan and Khan (2008) and Swain and Panda (2008), Obaseki, Oye and Mamman (2012) and Ekwelem, Okafor and Ukwuoma (2009). From the definitions, EIR are “soft” copy of available print information resources which are accessible electronically through computers and associated technologies. The format of these resources could be book, journals, magazines, music, films, newspapers, or realia. Electronic

resources will include scholarly materials contained in online databases, sources from web pages, electronic journals, electronic articles, electronic mail messages, online newsgroup postings and newsletters, government publications in electronic formats, electronic theses and dissertations, electronic newspaper, electronic-books, CD/DVD (Bavakenthy, 2003; Swain and Panda, 2008; Haridasan and Khan, 2008).

Electronic information resources have diverse kinds of benefits. These include but are not limited to providing quick global and convenient access to and exchange of information with experienced and expert personnel in the knowledge fields, easy dissemination of research findings, enhanced collaborative research, enabling the library to provide seamless information for their patrons irrespective of geographical location; helping in better management of information and space conservation and enhanced interlibrary collaboration (Obaseki, Oye and Mamman, 2012 and Igwebuiké, 2012). Generally, the principle of e-resource sharing is based on give and take. As libraries engage in acquiring, processing, preserving and dissemination of information from various sources, it behooves on them to contribute their own local content to the universal pool of information (Aina, 2013). This exercise would enhance the global image of the libraries and their parent institutions. Commenting on the prospects of e-resource sharing, Aina (2013) argued that full automation of library processes and digitisation of resources are achieved when libraries strive to apply web 2.0 principles and technologies in information service delivery and engage in various kinds of cooperative possibilities with respect to their OPAC. Aina added that library's ability to engage in e-resource sharing should enhance the development of digital library software that would make possibilities of resource sharing easier. Also, Ezra and Ukachi (2011) noted that the Internet World Statistics 2011 asserts that over 44million Nigerians use the internet. The users according to them prefer using digital resources and services to conduct their academic research. The majority of these users are students, academic and research staff of universities. Consequently, academic libraries involved in e-resource sharing will not lack customers, but will rather face a lot of challenges to cope with the demands of these users.

Application of ICT has made resource sharing possible. Libraries now find it easy to engage in various kinds of cooperative possibilities using OPACs and the development of digital library software like Greenstone, CDSware, and the CERNDocument server software (Ekoja, 2011). Also, web 2.0 tools like blogs, instant messenger, online communities, video sharing, web conferencing, face book, RSS feeds, Wikis, Podcasts, flicker, tagging and MySpace have been identified as facilitating resource sharing electronically (Ekoja, 2011, O'Reilly, 2005 and Aina, 2013). In the opinion of the authors, libraries can use these tools to create their own content on the web which can be used to contribute/share resources with others to serve the information needs of users. For this reason, it is important that attention be paid on the current situation in Nigerian university libraries with emphasis on how they meet users' needs for information through e-resource sharing.

Accessibility of EIR is possible through various means. However, the most important to Nigerian academic institutions is the World Wide Web (www). This has become a major source of EIR for study, learning and research (Adeniji, 2012 and Igwebuiké, 2012). There are certain other EIR that are usually accessed through such offline channels such as CD/DVD databases, library intra network systems, online databases, etc. (Obaseki, Oye and Mamman, 2012, Swain and Panda, 2008, Haridasan and Khan, 2008 and Bavakenthy, 2003). These e-resources have become a convenient source of current information for academic staff and students in Nigerian universities. Engaging in EIR also requires some ICT facilities. These have been listed by Siddike (2012) to include broad band internet connectivity, personal computers (desktop, laptop, iPADS, etc), computer server, library management software, antivirus, library/organisational website, scanners, photocopiers, CD-ROM readers, printers, multimedia/digital projectors, digital cameras. The foregoing shows that EIR has become a convenient information source of current information for academic staff and students in Nigerian universities. Therefore, efforts made by libraries to make them available to their user community would be regarded as a worthwhile venture.

University libraries' engagement in electronic resource sharing in Nigeria has experienced a number of challenges. These have been discussed by Anasi,

Akpan and Adedokun (2012), Nwalo, (2012), Obaseki, Oye and Mamman (2012), and Nwose and Jiagbogu (2011). The challenges identified include: lack of relevant ICT skills and awareness of the existence of knowledge sharing platforms, inadequate ICT facilities, unstable power supply and low level of conversion of local content for national and international access, among others. From the above review, it is evident that the majority of the literature dwelt generally on electronic resources and e-resource sharing. With the exception of Aina's (2013) work, none of the works investigated the prospects and the challenges of e-resource sharing. In addition, none of the studies focused on the state of e-resource sharing in the three southern geopolitical zones of Nigeria. This work is therefore designed to fill this gap.

## **Methodology**

The descriptive survey method was adopted for the study. The population was made up of all the university librarians (or their representatives) of the government-owned universities, numbering 37 (18 federal and 19 state universities) in southern part of Nigeria (South-East, South-West and South-South geopolitical zones) as published by the National Universities Commission (2012). The justification for using the three zones in southern part of Nigeria. The choice of the university librarians is based on the fact that the study was a policy one that requires input from the library administration. The questionnaire was used for data collection. Because the small population, all the university librarians were surveyed. The questionnaire has five sections with 83 items that address the subject of study with close-ended questions. The questionnaire was distributed

at the Annual General Meeting and National Conference of the Nigerian Library Association held in Enugu in June 2014, out of the 37 copies distributed 23 copies (14 from federal universities and 9 from state universities as listed in Appendix) which represented 62% were filled, returned and found useful for the analysis. The use of this response rate was justified by the prescription given by Punch (2003) which indicated that response rate of 60% and above is acceptable, as it is representative of the population and diminishes the chance of bias. The data were analysed using percentages for all the research questions.

## **Result and Analysis**

### **Demographic Information**

The demographic data of the respondents show that 18 of the respondents representing 78% were male while 5 representing 22% were females. In terms of qualification, 3 (13%) had first degree, 15 (65%) had Master's degree while 5 (9%) had Doctor of Philosophy degree. Lastly, 2 representing 9% were aged 31 -35 years; 6 (26%) were aged 36 – 40 years.; 7 (30%) were aged 41 – 45 years; 5 (22%) were 46 – 50 years; while 3 (13 %) were aged above 50 years.

### **Types of Electronic Information Resources Available in the University Libraries**

Two lists were provided from which librarians were requested to indicate the availability or non availability of internet resources and online databases for electronic resource sharing in the libraries. The results are presented in Tables 1 and 2.

**Table 1: Electronic Information Resources (Internet Information) Available for Electronic Resource Sharing N=23**

S/No	Items (Information Resources)	Available		Not available	
		No.	%	No	%
1	Electronic Books	20	87	3	13
2	Electronic Journals	18	78	5	22
3	Web-based OPAC	7	30	16	70
4	Electronic Dictionaries, Encyclopedias, etc	17	73	6	27
5	Electronic Theses and Dissertations	20	87	3	13
6	Electronic Newspapers	18	78	5	22
7	Electronic Magazines	17	73	6	27
8	Electronic abstracts	16	69	7	31
9	Electronic Indexes	15	65	8	35

With respect to the availability of internet information resources as shown in Table 1, only web – based OPAC scored a low percentage response with 30%. Other resources such as electronic books (78%), electronic theses and dissertation (87%), electronic

journals (78%), and electronic newspapers (78%), were available as indicated by their high percentage scores of respondents. Other available resources include electronic magazines (73%), electronic dictionaries, encyclopedias Z etc, (73%), electronic abstracts (69%) and electronic indexes (65%).

**Table 2: Online Databases Available for Electronic Resources Sharing N=23**

S/No	Items (Online Databases)	Available		Not available	
		No.	%	No.	%
1	Web page sources	16	70	7	30
2	News group postings (Web 2.0)	14	61	9	39
3	Nigerian virtual Library	16	70	7	30
4	EBSCOHOST	14	61	9	39
5	UNESCO archive portals	7	30	16	70
6	Directory of Open Access Journals (DOAJ)	16	70	7	30
7	Online access to Research in the Environment (OARE)	17	73	6	27
8	Journal Storage (JSTOR)	18	78	5	22
9	Access to Global Online Research in				
	Agriculture (AGORA)	19	83	4	17
10	Biomedical and Life Sciences	14	61	9	39
11	Health Internetwork Access to Research Initiative (HINARI)	18	78	5	22
12	Encyclopedia of Life Support System (EOLSS)	14	61	9	39

Data in Table 2 shows that the percentage availability of online databases in the libraries surveyed. Revelation from the data indicates that the available databases were AGORA (83%), HINARI (78%), JSTOR (78%), OARE (73%) and Nigerian Virtual Library (70%). Others are DOAJ (70%), Web page sources (70%), Biomedical Life Sciences (61%), and EOLSS (61%). The availability

of UNESCO Archive Portals was low with a percentage response of 30.

### ICT Facilities Available for E-Resource Sharing in the University Libraries

Librarians were asked to indicate either the availability or non availability of a list of ICT facilities for e-resource sharing in the libraries. Data in table 3 shows the responses.

**Table 3: Availability of ICT Equipment for Electronic Information Resource SharingN=23**

S/No	Items (Equipment)	Available		Not Available	
		No.	%	No.	%
1	Personal computers (Desktops, Laptops, iPods, etc.)	20	86	3	14
2	Computer servers	17	74	6	26
3	Library Management Software	8	35	15	65
4	Library Website (or University Website)	16	70	7	30
5	Subscribed Systems Antivirus (not free antivirus)	18	78	5	22
6	Scanners	21	91	2	9
7	Free antivirus downloaded from the internet	15	65	8	35
8	CD-ROM Readers	18	78	5	22
9	Multimedia/Digital Projectors	17	74	6	24
10	Projector Screens	17	74	6	24
11	Printers	16	70	7	30
12	Photocopiers	21	91	2	9
13	Digital cameras	18	78	5	22
14	Internet connectivity	19	83	4	17
15	Subscribed Broad Band Internet Connectivity	18	78	5	22
16	Electronic Mail facilities	19	83	4	17

Data in Table 3 shows that all except one of the identified ICT equipment were available as indicated by the high percentage response of between 60 – 91%. A low percentage response was recorded for the item on availability of library management software (35%). This implies that all the libraries under study were equipped with ICT equipment ranging from personal computers, computer servers, library website, subscribed system antivirus, scanners, CD-ROM readers, multi-media projectors,

printers, digital cameras, internet connectivity, etc.

### Modes of Access Provision of E-Resources to Users through E-Resource Sharing

A list of identified modes of providing access to e-resources through e-resource sharing was provided from which the librarians were to make a selection of the modes they used. Data in Table 4 represents the percentage responses.



**Table 4: Mode of Providing Access to Electronic Information Resources through Resource Sharing N=23**

S/N	Mode of Providing Access	No.	%
1	Co-operative collection development with other university libraries	0	0
2	Co-operative subscription (acquisition) with other university libraries	0	0
3	Stand alone subscription to EIR by the library from database producers	23	100
4	Downloading EIR from various Open Access Website and creating folders in the library portal	22	96
5	Through the National Universities Commission (NUNET)	13	57
6	Individual user oriented request through other academic institutions in a network arrangement	15	65
7	Through a structured consortium arrangement with other institutions	0	0

Revelation from the data in Table 4 shows that the mode of providing access to e-resource sharing that was common to all the libraries is the stand - alone subscription to electronic information resources by libraries from database producers (100%). This is followed by downloading of EIR from various open access websites and creating folders in library portals (96%), individual user oriented request through other institutions (65%) and access provision through the NUNET project of the National Universities Commission (57%). None of the libraries engaged in cooperative acquisition,

cooperative collection development and other structured consortium arrangement with other libraries.

#### **Extent of Providing Access to Information Resources through E-Resource Sharing**

The respondents were requested to assess the extent to which access to information resources was provided through e-resource sharing. The items were rated to as: very high extent, high extent, low extent, and no extent as indicated in Table 5.

**Table 5: Extent of Providing Access to Information Resources through E-Resource Sharing among the Libraries N=23**

S/N	Electronic Resources	Very High Extent		High Extent		Low Extent		No		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%
1	Electronic books	8	35	8	35	4	17	3	13	23	100
2	Electronic journals	10	43	7	30	5	22	1	14	23	100
3	Databases (AGORA, OARE, HINARI, JSTOR DOAJ, EOLSS, etc)	4	17	9	39	7	30	3	13	23	100
4	Electronic theses and dissertations	4	17	3	13	13	57	3	13	23	100
5	Electronic newspapers	12	52	4	17	3	13	4	17	23	100
6	Electronic magazines	6	26	6	26	4	17	7	30	23	100
7	Electronic abstracts	4	17	2	9	11	48	6	26	23	100
8	Electronic indexes	5	22	2	9	9	39	7	30	23	100
9	Web page resources	2	9	2	9	14	61	5	22	23	100
10	Newsgroup postings (web 2.0)	2	9	3	13	10	43	8	35	23	100
11	Electronic mail resources	4	17	3	13	13	57	3	13	23	100
12	Nigerian virtual library resources	3	13	2	9	14	61	4	17	23	100
13	UNESCO archive portal resources	5	22	2	9	9	39	7	30	23	100

Data in Table 5 presents the extent of access to information resources through e-resource sharing by the libraries. The result shows that the libraries could provide access to electronic journal as: very high extent by 10 (43%) librarians and high extent by 7 (30%). E-books were rated as: very high extent and high extent by 8 (35%) librarians respectively. Electronic newspapers were rated to a very high extent by 12 (52%) and high extent by 4 (17%) librarians. Databases were rated to a very high extent by 4 (17%) librarians and high extent by 9(39%). Lastly, electronic magazines were rated as: very high extent and high extent by 6 (26%) respectively. Access provision of other resources was either provided to a low extent or not provided at all as indicated by the high negative percentage responses. These include e-theses and dissertation,

e-abstracts, e-indexes, web-page resources, web 2.0 resources, e-mail resources, Nigerian Virtual library resources and UNESCO archival portal resources. It is clear from the foregoing that the libraries did not provide access to all the requisite resources that were useful to the patrons. Hence, the inference to be made from the above data is that the extent of providing access to information resources among the libraries is generally low.

### **Challenges of E-Resource Sharing among the University Libraries**

From a list of challenges to e-resource sharing, the librarians were to indicate their level of agreement or disagreement by the data in Table 6.

**Table 6: Percentage Challenges of Electronic Information Resource sharing N=23**

S/N	Challenges of electronic resource sharing	Strongly Agree		Agree		Disagree		Strongly Disagree		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%
1	Lack of awareness of the existence of resource sharing platforms	14	61	7	30	2	9	0	0	23	100
2	Inadequate ICT facilities for resource sharing/ networking	12	52	6	26	4	17	1	4	23	100
3	Absence of institutional repositories	7	30	14	61	2	9	0	0	23	100
4	High cost of Internet connectivity	10	43	9	39	3	13	1	4	23	100
5	Lack of electronic resource sharing policies/standards in the institutions	14	61	9	39	0	0	0	0	23	100
6	Declining budgets for e-resources acquisition/licensing	9	39	8	35	5	22	1	4	23	100
7	Slow rate of building local content for national/ international access	11	48	10	43	0	0	2	9	23	100
8	Uneven development of libraries in EIR acquisition/ licensing	8	35	12	52	3	13	0	0	23	100
9	Inability of libraries to meet the minimum commitment required to join consortia	9	39	7	30	1	4	1	4	23	100
10	Nationally and internationally poor bibliographic control of available e-resources by university libraries	6	26	14	61	3	13	0	0	23	100
11	Insufficient bandwidth for easy access to the internet	12	52	9	39	2	9	0	0	23	100
12	Lack of government support to universities on e-resource sharing	12	52	7	30	4	17	0	0	23	100
13	Inadequate number of librarians with web technology skills	7	30	13	57	2	9	1	4	23	100

Evidence from the percentage responses in Table 6 shows that all the identified factors posed challenges to electronic resource sharing among the libraries studied. The most serious issue was the lack of institutional policies and standards. Slow rate of building local content for national/ international access scored 11 (48%) strongly agreed, 10 (43%)

agreed, with only 2 (9%) of the librarians recording strongly disagreed. Absence of institutional repositories in most of the libraries was rated strongly agree by the 7 (30%) librarians and 14 (61%) agree. Other challenges include inadequacy of librarians' technological skills, uneven development of libraries for electronic information resource acquisition and

licensing, high cost of internet connectivity, inability of libraries to meet minimum requirements for joining consortia, lack of government support to universities for e-resource sharing and poor bibliographic control of available e-resources by libraries.

### Strategies for Enhancing E-Resource Sharing among the University Libraries

A number of factors were identified as strategic for enhancing electronic resource sharing among the university libraries. The respondents rated them as very important, important, neutral and unimportant as captured in Table 7.

**Table 7: Strategies for Enhancing Electronic Information Resource Sharing**

S/N	Strategies	Very important		Important		Neutral		Unimportant		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%
1	Creating awareness of the existence of EIR sharing platforms among libraries	17	74	6	26	0	0	0	0	23	100
2	Provision of ICT facilities for creating EIR in libraries	18	78	5	22	0	0	0	0	23	100
3	Building institutional repositories as core part of services provision for library users.	17	74	5	22	1	4	0	0	23	100
4	Making internet accessibility affordable to both libraries and users	16	70	7	30	0	0	0	0	23	100
5	Formulating EIR sharing policy in the libraries	19	83	4	17	0	0	0	0	23	100
6	Increasing budget allocations for acquiring EIR	18	78	5	22	0	0	0	0	23	100
7	Promoting professional development of librarians in electronic resources sharing through workshops, conferences and seminars	17	74	6	26	0	0	0	0	23	100
8	Improving on bibliographic control of available electronic information resources	15	65	8	35	0	0	0	0	23	100
9	Creating a coordinating agency tasked with creating and maintaining standards for EIR	16	70	7	30	0	0	0	0	23	100
10	Increasing the internet bandwidth for faster accessibility to the internet	18	78	4	17	1	4	0	0	23	100

Deduction to be made from the data in Table 7 is that all the identified factors were strategic for enhancing electronic resource sharing among libraries. Apart from the items on “building institutional repositories as core part of service provision for library users” and “increasing internet bandwidth” which were rated neutral by 1 (4%) respondent all the other items were rated together as very important and important by 100% of the respondents. These items are formulating electronic resource sharing policies in libraries, making internet connectivity affordable to libraries and users, increasing budgetary allocation for acquiring electronic information resources and provision of ICT facilities for creating electronic information resources. Others include creating awareness of the existence of electronic resource sharing platforms among libraries, promoting professional development of librarians on electronic resource sharing skills, creating a coordinating agency for developing and maintaining standards for electronic resource sharing and improving on bibliographic control of available electronic resources in libraries and

## Discussion of Findings

The findings of the study show that the university libraries studied had diverse kinds of electronic information resources. Availability of these resources could be linked to the presence of internet connectivity in almost all the libraries. This has made it possible for them to have access to web-based resources and databases through which access to e-books, e-journals, e-theses and dissertations, e-newspapers and magazines are guaranteed. The findings indicated a limited availability of web-based OPAC in the libraries which is one indication that the libraries were not yet in a state of engaging in e-resource sharing.

With respect to availability of ICT facilities for e-resource sharing, the findings show that the requisite facilities were available in the libraries with the exception of library management software in majority of the libraries. The non availability of library management software in these libraries negates the prescription given by Siddike (2012), which identifies it among the essential facilities required for e-resource sharing. According to Siddike, engaging in e-resource sharing requires some ICT equipment

that includes broadband internet connectivity, personal computers, computer server, library management software, antivirus, scanners, photocopiers, CD-ROM readers, etc. Without a good and reliable library management software, e-resource sharing cannot be possible as the processes involved in migrating to e-resource sharing platform including automation, digitisation, development of institutional repositories all depend on the application of management software.

The findings on mode of providing access information resources through e-resource sharing show that the libraries engaged in stand-alone subscription to electronic information resources from database producers, download resources from websites and create folders in library portals, link with the NUNET for information resources (when it was still functional) and through individual-oriented request. A consideration of these modes of providing access shows that but for the later mode, the identified modes are not actually addressing the issue of resource sharing among the libraries. The efforts may be to increase the information base of the individual libraries with which to attend to local users and other researchers from other universities on individual request bases and not necessarily to engage in any form of networking. This shows that the libraries did not engage in any form of standard/structured e-resource sharing.

The extent of providing access to resources through e-resource sharing was generally low. The reason for this is obvious since the libraries were not engaged in any formalised resource sharing arrangement as noted with respect to the finding on lack of library management software and on the mode of providing e-resource sharing services among the libraries.

Lack of institutional policies/standards, inadequate ICT facilities, lack of awareness of e-resource sharing platforms and insufficient internet bandwidth were major challenges of e-resource sharing/networking. Other challenges include, lack of government support, absence of institutional repositories, inadequate technological skills of librarians, etc. This finding corroborate the findings of Anasi, Akpan and Adedokun (2012), Nwalo (2012), Nwose and Jiagbogu (2011) and Obaseki, Oye and Mamman (2012), who in different studies indicated that those factors were challenges to e-resource

sharing. All these indicate that the challenges of e-resource sharing are mostly administrative-oriented.

The identified strategies for enhancing e-resource sharing include: formulating resource sharing policies in libraries, making internet connectivity with increased bandwidth affordable, increasing budgetary allocation for acquiring e-resources, provision of ICT facilities, creating awareness of existing e-resource sharing platforms and creating a coordinating agency for e-resource sharing, in addition to building institutional repositories in the universities. All these would go a long way in placing the university libraries at a vantage position of engaging in collaborative service delivery that would boost the image of the individual parent universities, especially now that the NUC has established/commissioned the NgREN to meet the information needs for research and education through a connectivity platform that links participating institutions for sharing e-services (Atah, 2014).

## Conclusion

This paper tried to establish the prospects and the challenges of engaging in e-resource sharing among university libraries in Nigeria. It has noted that no library can harness/contribute to the universal pool of information in the present knowledge society without the application of technology with which the capturing and projection of its local content for global visibility are made possible. In the prevailing low budgetary allocation and high cost of acquiring the diverse kinds of information resources available in the world wide web, electronic resource sharing is seen as an effective means of bridging the gap between the “haves” and “have not’s” among the libraries for effective service delivery.

## Recommendations

With respect to the findings of the study, the following recommendations are made:

- The university management need to facilitate full development of ICT infrastructures/facilities such as web-based OPAC and library management software that would drive/facilitate e-resource sharing in libraries.

- The library management need to enter into a more structured/standard networking arrangement that would provide a common platform for e-resource sharing among libraries in Nigeria.
- The Nigerian Library Association should advocate for government interest/support in formulating standard policies and programmes that would encourage consortium formation for resource sharing among university libraries in Nigeria.

## References

- Adeniji, M. A. (2012). Utilization of Electronic Resources by the Lecturers of the College of Engineering and Environment Studies of Olabisi Onabanjo University, Ogun State Nigeria. *Proceedings of the 12<sup>th</sup> Annual Conference/ AGM of Nigerian Library Association Enugu State Chapter: 21<sup>st</sup> – 23<sup>rd</sup> November, Enugu.*
- Aina, A. J. (2013). E- Library Approach for Resource Sharing in an Information Communication Technology Era: Issues Prospects and Challenges. *International Journal of Library and Information Science*, 5(4), 77 - 84
- Anasi, S. N., Akpan, I. J. and Adedokun, T. (2012). Information and Communication Technologies and Knowledge Sharing Among Academic Librarians in South West Nigeria. In: L. O. Aina and Mabawonku Eds. *Nigerian Library Association @ 50: Promoting Library and Information Science Profession for National Development and Transformation*. Ibadan: University Press Plc. (Pp1 – 20).
- Atah, J. (2014). Leveraging on Association/ Consortium: A New Challenge for Digital Learning – The NUC-Ngren Example. *TETFUND Capacity Building Workshop on Acquisition and Management of E-Library for Librarians in Public Tertiary Institutions*, 20 – 30 October, Okoh.
- Bavakenthy, M., Veeran, M. C. K. and Salih, T. K. M. (2003). *Information Access Management and Exchange in the Technological Age*. New Delhi: Ess Publications.

- Calhoun, K. (2006). The Changing Nature of the Catalog and its Integration with Other Discovery Tools. *A Report Prepared for the Library of Congress*.
- Dannelly, G.N. (1995). Resource Sharing in the Electronic Era: Potentials and Paradoxes. *Library Trends*, 43(4), 663 – 673.
- Ejedafuru, E. F. (2010). Lack of ICT Infrastructure as a Barrier to Resource Sharing in Nigerian Libraries. *Library Philosophy and Practice*. [Http://Unilib.Unl.Deu/LPP](http://Unilib.Unl.Deu/LPP) Accessed 8 February, 2014
- .Ekwelem, V. O., Okafor, V. N. and Ukwuoma, S. C. (2009). Students' Use of Electronic Information Sources at the University of Nigeria, Nsukka. *African Journal of Library, Archival and Information Science*, 19(1), 89 – 97.
- Ekoka, I. I. (2011). Modern ICT Tools: Online Electronic Resources Sharing Using Web 2.0 And Its Implications for Library and Information Practice in Nigeria. *Samaru Journal of Information Studies*, 11(1 and 2), 53 – 58
- Ezra, S. G. and Ukachi, N. B. (2011). An Assessment of Technological Skills Competency of Academic Librarians in Nigeria. In L. O. Aina and Mabawonku Eds. *Information For All: Strategies For National Development*. Ibadan: University Press Plc, pp. 65 – 80.
- Haridasan, S. and Khan, M. (2009). Impact and Use E- Resources by Social Scientist in National Social Science Documentation Centre (NASSDOC) India. *The Electronic Library*, 27(1), 117 – 133.
- Igwebuike, E. U. (2012). Exploring Internet Access and Use among Students of Godfrey Okoye University for Effective Learning. . *Proceedings of the 12<sup>th</sup> Annual Conference/ AGM of Nigerian Library Association Enugu State Chapter: 21<sup>st</sup> – 23<sup>rd</sup> November, Enugu*.
- Kaul, S. (2001). Information Resource Sharing Models in Countries: A Network Emerging from the World Bank Supported Environmental Management Capacity Building Project. *INSPEL* ,35(1), 9 – 26. Available: [Http://Www.Ifla.Org/VII/D2/Inspel/01-/Kasu.Pdt](http://Www.Ifla.Org/VII/D2/Inspel/01-/Kasu.Pdt)
- Manjunatha, K. and Shivaliongaiah, D. (2003). Electronic Resource Sharing in Academic Libraries. *Annals of Library and Information Studies*, 50(1), 27 – 30.
- National Universities Commission. (2012). Approved List of Nigerian Universities. [Http://Www.Nuc.Edu.Ng/Pages/Universities.Asp?Ty=1andOrder=Inst Name](http://Www.Nuc.Edu.Ng/Pages/Universities.Asp?Ty=1andOrder=Inst Name). Accessed 16 February 2013.
- Nwalo, K. I. N. and Ogunniyi, S. O. (2012). Networking of Academic Libraries in Ondo State, Nigeria. In: L. O. Aina and Mabawonku Eds. *Nigerian Library Association @ 50: Promoting Library and Information Science Profession for National Development and Transformation*. Ibadan: University Press Plc, pp113– 127.
- Nwose, L. and Jiagbogu, C. O. (2011). Networking Resource Sharing and Consortium Building: Panacea for Better Library Services in an Electronic Age. *Nigerian Library Link: A Journal of Library and Information Science*, 9(1and2), 35 – 41.
- Obaseki, T. I., Oye, P. O. and Mamman, E. S. (2012). Furthering Use of Electronic Information Resources in Services Provision for Sustainable Development. *Proceedings of the 12th Annual Conference/AGM of Nigerian Library Association Enugu State Chapter: 21<sup>st</sup> – 23<sup>rd</sup> November, Enugu*, pp. 59 – 64.
- O'Reilly, T. (2005). What is Web 2.0: Design, Patterns and Business Models for Next Generation Software. [Http://Www.O'reilly.Com/Pub/A/Oreilly/Tim/News/2005/09/30/What-Is-Web2.0.Html](http://Www.O'reilly.Com/Pub/A/Oreilly/Tim/News/2005/09/30/What-Is-Web2.0.Html). Accessed 22 September, 2013.
- Parent, I. (2012). Libraries – A Force for Change: Inspiring... Surprising... Empowering. *IFLA Journal*, 38(4), 322- 328.
- Report of the United States National Inquiry. (1979). *Scholarly Communication*. Baltimore: John Hopkins University Press.
- Siddike, A. K. (2012). User's Perceptions Regarding Networking and Resource Sharing in Selected

Academic Libraries in Bangladesh. *Library Philosophy and Practice*, [Http://Unilib.Unl.Deu/LPP](http://Unilib.Unl.Deu/LPP). Accessed 8 February, 2014

Swain, D. K. and Panda, K. C. (2009). Use of Electronic Resources in Business School Libraries of an Indian State: A Study of Librarian's Opinion. *The Electronic Library*, 27(1), 74 – 85.

**Harriet Uche Igbo** is Senior Librarian at the Nnamdi Azikiwe Library, as well as an Adjunct Lecturer in the School of General Studies, University of Nigeria, Nsukka. She holds Master's degrees in Education and Library and Information Science, as well as a Bachelor of Education degree. She is currently a doctoral student at the Department of Library and Information, University of Nigeria, Nsukka.



**Nwabuisi T. Imo** is Deputy University Librarian and Head of Serials Division at the Nnamdi Azikiwe Library University of Nigeria, Nsukka. He obtained Masters Degree in Library Studies from University of Ibadan in 1995. He is currently a doctoral student at the University of Nigeria, Nsukka.





**APPENDIX****LIST OF THE 23 UNIVERSITIES INVOLVED IN THE STUDY**

<b>S/N</b>	<b>Location</b>	<b>Name of University</b>	<b>Type</b>	<b>Year of Est.</b>
1	South-East	University of Nigeria, Nsukka	Federal	1960
2	South-East	Nnamdi Azikiwe University, Awka	Federal	1992
3	South-East	Michael Okpara University of Agriculture, Umudike	Federal	1992
4	South-East	Federal University of Technology, Owerri	Federal	1980
5	South-East	Enugu State University of Science and State Technology		1982
6	South-East	Ebonyi State University	State	2000
7	South-East	Anambra State University, Uli	State	2000
8	South-South	University of Calabar	Federal	1975
9	South-South	University of Port-Harcourt	Federal	1975
10	South-South	University of Benin	Federal	1970
11	South-South	University of Uyo	Federal	1991
12	South-South	Federal University of Petroleum Resources, Effrum	Federal	2007
13	South-South	Rivers State University of Science and Technology	State	1979
14	South-South	Ambrose Ali University, Ekpoma	State	1980
15	South-South	Cross River State University of Science and Technology	State	2004
16	South-West	University of Ibadan	Federal	1948
17	South-West	University of Lagos	Federal	1962
18	South-West	Obafemi Awolowo University, Ile-Ife	Federal	1962
19	South-West	Federal University of Technology, Akure	Federal	1981
20	South-West	University of Agriculture, Abeokuta	Federal	1988
21	South-West	Ekiti State University	State	1982
22	South-West	Ladoke Akintola University of Technology, Ogbomosho	State	1990
23	South-West	Osun State University, Oshogbo	State	2006