

Awareness and Use of e-journals by Medical Students of Delta State University, Abraka (DELSU) and University of Benin, Benin City (UNIBEN) in Nigeria

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ABSTRACT

This study is a survey of the awareness and use of electronic journals by medical students of Delta State University and University of Benin in Nigeria. The population of the study comprises all the medical and clinical students of the two universities studied, which is 93. The entire population was used for the study because the population was small (41 in DELSU and 52 in UNIBEN). Data were generated using questionnaire and analyzed using frequency count and simple percentage. The findings reveal among various others, low level of awareness of e-journals and low computer literacy skills resulting in low level of usage of the e-journals among the medical students from both institutions. Based on the results of the findings, the study recommends among others that information literacy courses should be initiated compulsorily in course curriculum and libraries should be well equipped with internet facilities to encourage the use of electronic journals.

Keywords: *E-journals, Awareness, Use, Information.*

INTRODUCTION

Journals are academic magazines that are published in successive parts on a regular schedule. Articles in them are current information written by experts in particular field of study (Moon, 2006). Over the years journals have been used as sources of up-to-date information. Journals contain write-ups, reports, reviewed stories which are new discoveries by several contributors. Information contained in journals are more current than those in textbooks. In most cases, it is information that appeared in periodicals (including journals) which are distilled and published in textbooks (Adomi, 2008). The use of journals by scientist and researchers has developed over the years and during those years has evolved in specialized ways to fulfill their primary activities (Llewellyn, Pellack and Shonrock, 2002).

According to Tenopir and King (2002), studies conducted over the last four decades show that scientist, on the average, value journals and journal articles more than any other simple information resource. The reasons journals are preferred are not far-fetched. Rowland (1997) describes four major functions of a scholarly journal as discrimination of information, quality control, canonical archives and recognition of authors. In addition the articles to be published in scholarly journals are meticulously filtered by the editorial boards of the respective journals. The articles are peer-reviewed, the authorities of contributors are considered and the articles they published are on related topics (Tenopir and King, 2002). Studies show that advancement in information technology, including the

Internet and digitizing technology has made the worth of journals increase. This was brought about by the series of innovations in the way information materials are processed, stored and made available for use. This also affected the publication of journals. Jones and Cook (2000) claim that e-journals are a new method of delivering knowledge and building scholarly work. This new method of information delivery has found its way into the medical domain as in other fields. By the nature of the research carried out in the study of medicine, sources of current information are the most preferred. E-journals like their print counterparts are carriers of current information. Jones and Cook (2000) also explain that an electronic journal is a digital periodical that is published on the internet or World Wide Web. E-journals are not all that different from print journals in the fundamental editorial process. It is the digital medium that makes them different.

According to Adomi (2008), electronic journals may be electronic only, an electronic-only version of former print journals or a simultaneous version of an existing print journal. Electronic journals can be free, paid by subscription, pay per use or licensed for access right. Just like the print version, some electronic journals may be in issues, while others may be released separately and as stated earlier, they may, or may not have print versions. Some authors try to distinguish between these two forms by calling those journals originally published electronically without print version "electronic-only journals" (e-only journals). Basically, electronic journals are the same thing as print journals, but as Jones and Cook (2000) explains it is only the medium of publication that is different—digital and print. The advent of the internet as the warehouse of knowledge and the emergence of the World Wide Web made the availability of, and access to electronic journals easy for students. Electronic journals are now mushrooming on the web and in CD ROM format—although no exact number is yet available (Chu, 2000).

A lot of studies are in support of the view that scientists are more active in the use of e-journals. Bansode (2013) conducted a research on the use and impact of electronic journals on the users of University of Pune, Pune, India and found out that 81.81% of the respondents of which majority are from science departments affirmed that e-journals have impacted their academic life greatly and has helped to increase their academic and research productivity. Similarly the findings of Borrego, Lluís, Maite and Nuria (2007) reveal high usage and preference for e-journals among academic staff in biomedicine, exact and natural sciences and engineering departments of the Catalan universities. According to D'Alessandro (2004) as quoted by Tenopir, King, Clarke, Kyoungsik and Xiang (2005) in a study of journal reading patterns, it was found out that medical students prefer print for personal subscription, but more of the articles they read from the library come from electronic journals. Bar-Ilan, Bluma and Yechezkel (2003) report a positive attitude towards the acceptance and use of e-journals among the academic staff of Israeli universities especially those in medical sciences. In a survey of graduate student end-users' use and perception of electronic journals in Nanyang Technological University and National University of Singapore, Liew, Foo and Chennupati (2000) record a high percentage (73.5%) preference of e-journals among respondents surveyed stating that users indicate a growing interest in e-journals as they consider it to be an important source of information.

However, the greatest problem is that till this present day most academic libraries in Nigeria are yet to be computerized and to connect to the internet. Most students either do not have access to the internet or are not computer literates. The question now is how are such students able to use e-journals for their studies and research? This study therefore seeks to assess the level of awareness and use of electronic journals among medical students of Delta State University and University of Benin and to highlight the benefits of using e-journals. The electronic journals search skills of the students are also considered. The study shall also consider issues on: the students' level of ICT literacy; the students' level of awareness of electronic journals; the means, through which medical students become aware and access electronic journals, how medical students have access to electronic journals, and where students acquire skills to use electronic journals. Other issues that will be explored include: the students' purpose of using or consulting electronic journals, ways medical students benefit from the use of electronic journals, and problems students are likely to encounter when using electronic journals.

The relevance of this study is that it will reveal to Nigeria universities' students the advantages e-journals have over printed journals. It will also assist the students in Nigeria universities to move with time in the fast moving world of information and researches going on globally, since journals are sources of current and up to date information. Furthermore it will create the avenue for students to improve on information technology skills which is a prerequisite for one to fit in the information age. It will also expose to university managements' the need to equip their libraries with up-to-date e-journals to support students' research and academics.

The Importance of Electronic Journals

According to Park (1997) as cited by Adomi (2008) library users are increasingly depending on electronic resources to meet their information needs. This Adomi (2008), explain is due to the fact that myriad information is available in electronic format. In line with the above, Ajuwon (2003) states that the Internet and World Wide Web are now the most important sources of information for students in institutions of higher learning throughout the world. The realization of this importance has shifted the attention of users to electronic sources and resources. As noted by Chu (2000), rapid advancement of information technologies, including the Internet and digitizing techniques means that electronic journals are mushrooming - on the web and CD-ROM format. He explains that many more journals have been earmarked for digitizing and that a considerable number is now published electronically only. Luther (2002) notes that information in digital form has functional properties that can save user's time (Sathe, Grady and Giuse (2002). This means that information in electronic form has the ability to free up much needed time for students and researchers. According to Llewellyn, Pellack and Shonrock (2002) electronic only journals offer several advantages that cannot be translated to a print version. One of these is increased speed of production achievable through electronic interaction between authors, editors and readers: available through computer networks (for example Internet, Intranet and LAN) and the use of multi-media materials-molecular models, audio clips such as bird

calls, or video clips of a chemical reaction taking place. The significance of this is that users are now being more aware of the importance and advantages of using electronic resources. The pool of electronic journals is being expanded underscoring the fact that electronic journals have countless advantages over print journals. The greatest of these are easy access, convenience, increased search capabilities and direct access (Super journals Project, 1999 as cited by Tenopir and King, 2002). Chu (2000) gives the following advantages of electronic journals over print journals: they allow and promote remote access; can be used simultaneously by more than one user and provides timeless access. This is an emphasis on the importance of ease and convenience in the access and use of online journals. Chu adds that electronic journals generally do not require physical processing (receiving and binding). They are environment friendly, and they can be saved digitally. These according to him, explain why electronic journals are preferable to print journals.

Tenopir, King, Clarke, Kyoungsix and Xiang (2005) gather from their study of journal reading patterns and preferences of pediatricians that respondent's judged electronic journal to be more easily searchable than print journals. It is easy then to see why new users are being enticed into the world of electronic journals (Gessner 1996). Electronic journals are sources of current information and as such relevant for any meaningful research and study. Harter (1998) states on the use of e-journals that for there to be a meaningful transformation in scholarly work, e-journals must form an integral part of the scholarly process. As science students, medical students need sources of current information. There are some electronic journals that do not have print versions. It means information in such journals will never get to students and researcher who only use print journals. It is no news that conventional libraries are unable to meet the everyday need of the users.

METHOD

The descriptive survey method was used to gather information for the investigation on the awareness and use of electronic journals by the medical students of the University of Benin, Benin City and Delta State University, Abraka. At the time of this research the total number of 400 level clinical students of Delta State University was 41 and that of the University of Benin was 52, giving a the total population of 93. The entire population of 93 clinical medical students from both institutions was used as the sample for the study because the population was small. Ninety three copies of questionnaire were administered but 90 were retrieved; DELSU 40 (43%) while UNIBEN was 50 (54%) hence giving 90 (97%) response rate. The data obtained from the questionnaire were analyzed using frequency counts and simple percentage.

RESULTS AND DISCUSSION

Findings from this study reveal that the average medical student from both schools has low ICT skills. However, the number of students from the University of Benin who are ICT literates are comparatively higher. Also that the average medical student from both schools has low awareness of e-journals. However, the number of students from the University of

Benin who are aware of e-journals is comparatively higher. The reasons for this may be due to the fact that the main library of the University of Benin is computerized and linked to the internet while that of Abraka is yet to be; the fact that the University of Benin is an older, larger school with a greater possibility of more lecturers; Benin City is a bigger town and has far greater presence of internet and telecommunications facilities than Abraka.

The data on table 3 show that the percentage of medical students who become aware of electronic journals via the internet in Delta State University is 62.5%, while that of University of Benin is 74%. This result reveals that majority of the medical students from both institutions got awareness of electronic journals through the same means and processes. This corroborates Park's (1997) statement that library users are depending increasingly on electronic resources (Adomi, 2008). This is due to the fact that as Wirsly and Shafack (2002) explain, new information technologies (the Internet and Intranet) are getting into the mainstream of economic, social and cultural milieus of developing countries and gradually and inexorably changing their lives and status. Electronic resources are widespread, so students can learn or know about the existence of the electronic journals through any or the entire items listed on table 3.

From the analysis on table 4, it is evident that there is general low use of e-journal among the medical students from both universities. This is to be expected since students have already agreed to have little knowledge of e-journals. The data presented on table 5 shows that medical students from both institutions mainly get access to electronic journals at the cyber cafe's. This is represented by 100% for DELSU and 96% for UNIBEN. The study also reveals that Delta State University main library does not provide internet facilities for students. Although Delta State University medical library provides internet facilities, the medical students do not adequately utilize it to have access to electronic journals. This is also the case of University of Benin medical students. From the data obtained, medical students from both institutions make use of online journals to complete their assignments, for research, to obtain information and to update their knowledge. This is attested to by Kari (2005) who states that students, scientists and so on are using the internet to collaborate with colleagues throughout the world to share information and collect data to conduct basic research.

The data on table 7 show that respondents from both institutions agreed to have derived all the benefits listed above with only a few exceptions, 7.5% and 14% for DELSU and UNIBEN respectively. Morse and Chintworth (2000) in their study discovered that there was a predominance of e-journal usage compared to print usage. This according to them is due to the fact that electronic journals satisfied the respondents' needs that were previously not met in the print domain. The analysis reveals that majority of the respondents face all the problems listed above in the use of e-journals. It is apparent that majority of the students lack skills for using e-journals and then the library does not assist users in the provision of e-journals, hence the problem of high cost of access. The study assessed the awareness and use of e-journals among the medical students of the University of Benin and Delta State University, Abraka. The following were observed. The average medical student from both universities has low ICT skills. There is low level of awareness of

e-journals among the medical students of both institutions but Delta State University medical students revealed a lower level of awareness. There is a general low use of e-journal among the medical students from both institutions. Majority of the medical students from both universities access e-journals from cyber-cafes. A significant number of students also admit they access e-journals from their medical libraries, which is clear evidence that the medical libraries have internet facilities. However, medical students from Delta State University are not able to access e-journals from the university main library.

Table 1: Students' level of ICT literacy

Name of institution	DELSU	%	UNIBEN	%
Very high	5	10	5	10
High	10	20	19	38
Very low	-	-	5	10
Low	25	70	21	42
Undecided	-	-	-	-
Total	40	100	50	100

Source: Survey, 2009/2010

Table 2: Students' level of awareness of electronic journals

Name of institution	DELSU	%	UNIBEN	%
Very high	5	12.5	5	10
High	5	12.5	18	36
Very low	10	25	5	10
Low	20	50	22	44
Undecided	-	-	-	-
Total	40	100	50	100

Source: Survey, 2009/2010

Table 3: Means of Awareness

Means of Awareness	DELSU	%	UNIBEN	%
The Internet (browsing)	25	62.5	37	74
Lecturers, colleagues and friends	15	37.5	13	26
Medical journals	00	00	00	00
Articles/literature	00	00	00	00

Source: Survey, 2009

Table 4: Frequency of use of electronic journals?

Means of Skills Acquisition	DELSU	%	UNIBEN	%
Very Often	5	12.5	5	10
Often	5	12.5	15	30
Rarely	15	37.5	20	40
Very rarely	10	25	5	10
Never	5	10	5	12.5

Source: Survey, 2009/2010

Table 5: Access points of electronic journals

Means of Awareness	DELSU	%	UNIBEN	%
Cyber café	40	100	48	96
Friend's office	17	42.5	11	22
At home	12	27.5	17	34
Lecturer's office	00	00	6	12
Medical library	17	42.5	37	74
University (main) library	00	00	38	76

Source: Survey, 2009/2010

Table 6: Purpose(s) for which medical students use or consult electronic journals

Purpose of use	DELSU	%	UNIBEN	%
For assignments & class work	40	100	40	80
For research	38	95	39	88
To obtain information	40	100	30	60
To update knowledge	38	95	40	80

Source: Survey, 2009/2010

Table 7: Benefits of electronic journals

Types of electronic journal	DELSU	%	UNIBEN	%
Facilitates academic work	37	92.5	39	78
Easily/quick access of information	38	95	35	70
Enables me to stay current	37	92.5	38	76

Source: Survey, 2009/2010

Table 8: Problems likely to be encountered when using electronic journals

Problems	DELSU	%	UNIBEN	%
High cost of access	38	95	44	88
Slow response/access	25	62.5	30	60
Difficulty in accessing information	25	62.5	40	80
Inadequate search skills	33	82.5	30	60

Source: Survey, 2009/2010

CONCLUSION AND RECOMMENDATIONS

It is important to note that the medical students of Delta State University and University of Benin have very little to show in terms of ICT literacy and e-journal use. The universities have to do a lot to sensitize students on the use of e-journals in order to derive the full benefits e-journals have to offer. There is evidence of the existence of internet facilities at the main library of the University of Benin but medical students there do not yet fully utilize it to their benefit. It is important for the library/librarian to create awareness and conducive environment for the effective use of these facilities through user-education, workshops and seminars. Librarians should take it as a responsibility to advertise electronic journals, and intimate students on their importance as sources of up-to-date academic/research information. Libraries being the information warehouse of institutions should be equipped with internet facilities to enable students have access to electronic information.

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