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## INTERNET ACCESS AND USAGE BY STUDENTS OF THE COLLEGE OF MEDICINE, UNIVERSITY OF LAGOS

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### Abstract

*This study focused on the Internet Access and usage by students of the College of medicine of the University of Lagos. It investigated the adequacy of provision of access to the Internet facility especially that donated by the Christopher Kolade Foundation (CKF). The usage (in terms of usage and misuse) of the Internet by the students, as well as the problems the students faced in the use were also studied. Data was gathered through the use of questionnaire randomly administered to 200 students of 1999/2000 session. Findings revealed that the Internet facilities at the time of this study were inadequate - hence many students did not have access. It also revealed that although quite a number of the students were aware of the immense benefits of the use of the Internet for academic studies. They lacked the necessary skill to make effective use of it. The study observed that the CKF Internet exposed many of the*

*students to the use of Internet to access information. It also revealed some problems experienced while using the service. Some recommendations were made as solutions to these problems.*

### Introduction

The tremendous growth of the Internet and World Wide Web (www) over the last decade have revolutionized communication (Wall Street journal, 1997). The Internet has become an important component of the electronic services in the Academic Institutions and has permeated all aspect of life and thus broken down barriers of communication and information access worldwide. It is a valuable resource for information relating to health [Rippen-H E(1997)]. Also, reported by M.pallen. ic.ac.uk(2003), are the benefits of using the internet to medical practitioners. The Internet is growing rapidly, as it becomes easier to use and more biomedical resources become available on line. Rippen-H E(1997) supporting this adds that the internet technology now provides access to an enormous volumes and broad variety of health information. The demand for health information is reflected in the fact that currently, there are over 10,000 health related web sites Asheville Citizens-Times (1997). The Internet is bulging with health Sites. This is demonstrated by a report from Wall Street Journal (1997) which indicated that 36.7% of the general internet user population accesses the web to retrieve health and medical information. Unlike the general user who has been reported as averaging only 3.5% hours a month on the internet, those actively searching for health information are more likely to visit the web daily.

Studies by Herman (1998) and Jada (1998) reported that most user of the Net do

so for surfing the World Wide Web (www) and e-mail. Apart from this, a great deal of information is available to assist in patent education and medical decision making, According to Bumberg,P et. Al (1999) and Ohels, J.A. et. Al(1999),the net is very popular that to Moore David (2000) that results from study carried out by Medical student revealed that use of computers and the internet in Sheffield University/United Kingdom 55% and 96% use the internet daily or weekly and the email daily respectively. The existence of this broad based medical information via the net as well of the trend in most educational institution of adopting information and communication technology led the College of Medicine, University of Lagos to provide access to the Internet (Olatunji-Bello et al). This was done vide the donation of the Internet facilities by the Christopher Kolade Foundation (CKF) and later the establishment of the computer laboratory.

In Nigeria, Ojo-Igbinoba(1997), advocated the situating of the internet in every Library so that the university staff and students may access it . As at (2001), most libraries in Nigeria had not gained access to the Internet. This unlike 7.4% of German population that had access (Oliver 1998). Sofolowe(2001) and Ojodokun,A A (2001) suggested that information Technology training be made available to all Medical graduates so that they can take advantage of the resources in the internet. Adedeji advises all researchers to sharpen their Internet exploratory skills because of the colossal amount of Medical information on the Internet The College of Medicine was established April 13<sup>th</sup> 1962 by an act of parliament which stated that the medical school in Lagos shall for all purpose be an autonomous unit of the

university (University of Lagos Calendar 1990-2000)

The College of Medicine like other similar Institutions world wide, has the responsibility part of which is improving the quality and increase the quality of human resources needed for the development of Nigeria. Access to up-to-date research and knowledge via the Internet is one ways of accomplishing this fit.

PURPOSE OF STUDY is to find out how accessible the Internet facility in the college library is to the students, discover the pattern of use, and what limitations if there are in the use of the facilities.

### Methodology

A student population of 1,628 for 1999/2000 session(college medicine file 2002). A total of 200 students were selected. This constituted 12.3% of the population. The random sampling technique was used to select respondents from the college who case table one. It is expected that since these students are the largest and the least in number respectively, the former will use the Internet the most while the latter will use it the least.

**Table 1. Profile of the Respondents**

| Course               | 200L | 300L | 400L  | 500L   | 600L | Total No. of Students | Administered question -naire | Questionnaires returned |
|----------------------|------|------|-------|--------|------|-----------------------|------------------------------|-------------------------|
| Medicine (MBBS)      | 38   | 50   | 112   | 133    | 192  | 1004                  | 100                          | 98                      |
| Dentistry (BDS)      | 46   | 46   | 40    | 133    | 51   | 224                   | 22                           | 22                      |
| Pharmacy (B.Pharm)   | 88   | 67   | 50    | 41     | -    | 219                   | 21                           | 20                      |
| Physiotherapy (B.Sc) | 38   | 24   | 6     | 34     | -    | 68                    | 7                            | 6                       |
| Pharmacology (B.Sc)  | 24   | 16   | 16    | -      | -    | 56                    | 6                            | 5                       |
| Physiology (B.Sc)    | 22   | 19   | 16    | -      | -    | 57                    | 7                            | 6                       |
| Total                | 605  | 352  | 220   | 208    | 243  | 1628                  | 200                          | 157(81%)                |
| Postgraduate         |      | M.Sc | MPhil | PHD(9) |      | 147                   |                              | 33(17%)                 |
| No status            |      |      | L (7) |        |      | 3                     | 3                            | 1.6%                    |

**Results and Discussion**  
**Access to the Internet**

The study revealed that the respondents had a variety of access points to the Internet. All of the respondents accessed the Internets

**Table 2: Access Points**

| Access Point                      | No. of Respondents | %    |
|-----------------------------------|--------------------|------|
| Medical Library                   | 193                | 100  |
| School/Faculty/Compute Laboratory | 50                 | 25.9 |
| Home                              | 5                  | 2.6  |
| Lecturer's office                 | 3                  | 11.9 |
| Cyber Cafés                       | 90                 | 56.9 |
| No response                       | 5                  | 2.6  |

through Internet office in the Medical Library which was accessible to all the students and staff at a fee of one hundred Naira for 15 minutes, N200 for 30minutes. Sending of Email through the library account was N50, receiving was N20 and printing per page was, also N20. These prices were cheaper than those of the Cyber-cafes that existed at the time that were between N10 to N20 higher. Apart from this, Internet services at cyber cafés, schools, home s and lectures' offices were also access points to the net for these respondents. A finding of this study also showed that the respondents tend to use the internet service in the medical library more than the other cyber cafes in the neighborhood. This either meant that students felt it was more convenient to use it while at the library studying or because at present there are few Internet centres in this area and of course it was relatively cheaper. The result is at variance with those of a similar study at University of Botswana by

Ojedokun(2001), where the internet service in the library was unpopular.

This study found that apart from the Internet in the Medical Library respondents have other points of access to the Internet. The cyber cafes scattered all over the city were very popular with the 56.9% of students attesting to having accessed the Internet through them. (Please go to table 2 for more details). The least popular was access via Internet at homes suggesting that most homes

**Table 3: Experience of Internet Search**

| Duration of Access | No. of Response | %    |
|--------------------|-----------------|------|
| Less than 6 months | 98              | 51.9 |
| 7 - 12 months      | 46              | 23.8 |
| 13 - 18 months     | 29              | 23.8 |
| 19 - 24 months     | 10              | 2.5  |
| 17 - 24 months     | 5               | 2.5  |
| Over 24 months     | 5               | 1.5  |

still do not have Internet accesses. This may not be unconnected with the high cost of purchasing hardware and software that are essential for internet connectivity, in spite of the fact that prices for the internet connection has taken a downward plunge.

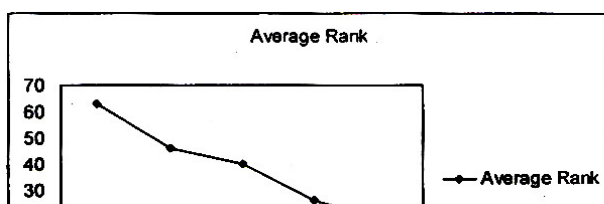
As regards to experience of internet search, 51.8% had less than 6 months duration access, 23.8% had between 7 - 12 months experience internet search while, only a negligible 1.5% of the subjects of this study had over 24 months experience of internet search AS AT 2000 AD.

**Table 4: Duration of Internet Search per week**

| Duration of Access | No. of Respondents | %    |
|--------------------|--------------------|------|
| Less than 1 hour   | 103                | 67   |
| 1- 3 hours         | 40                 | 20.7 |
| 4 - 6 hours        | 27                 | 13.9 |
| 7 - 9 hours        | 10                 | 5.2  |
| Over 10 hours      | 9                  | 4.7  |
| No response        | 4                  | 2.1  |

When questioned on the time duration of Internet search, (67%) of respondents replied that they had less than one hour duration access. Only 4.7% had over 10 hours access per week. This may be due to the prices charged per minute of this service. Hopefully, with the increasing number of Internet access points and the attendant downward review of prices of internet service, duration of access of internet search will increase. Also related to this may be, the fact that only 15 minutes is allocated to each user which is only renewable if there is no other person wishing to use the same system. (The number of PCs is limited to 8 pieces for the College of Medicine community). The students were requested to rate the regular use of email. Web browsing, newsgroup chat facilities and discussion group. It was found that electronic mail was highly used on the Internet with 32.6% of the respondents attesting to this. The chat facilities and discussion groups were the least used by the students with 13.5% and 9.3% of respondents respectively. Please see fig.1. for details.

**Figure 1. Use of Internet facilities**



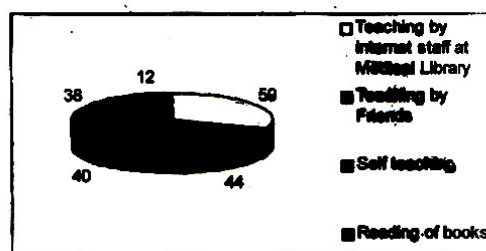
In deciphering how students came to learn of the use of the Internet, five possible learning sources were suggested. They were requested to tick the most important in the acquisition of skills needed to surf the Internet (for more details see figure 2). It was discovered that students acquired skills in descending order of importance: teaching by internet staff, 39.6%, teaching by friends

22.8%, self teaching 20.7%, reading of books 19.7% and internet literacy programme by local cyber cafes 6.2%.

**Table 5: Use of the e-mail**

| Use Communication with friends and relations | Number of respondents | %    |
|--|-----------------------|------|
| Communication with students                  | 85                    | 44   |
| Communication with lecturers                 | 41                    | 21.4 |
| Participation in discussion groups           | 12                    | 6.2  |
| Other uses                                   | 10                    | 9.8  |
| Non-use of email                             | 17                    | 9.8  |
| No response                                  | 28                    | 14.5 |

**Figure 2. Mode of acquiring skills**



Ironically, the library staff at the internet office were the most popular mean of acquiring the use of the internet to respondents. It seems to suggest that the Medical Library should make concerted effort to have regular programme for imparting this knowledge to the users. Also, in these days of low funding it could generate a little fund from this programme.

### Usage of the Internet

This study tried to find out how Internet facilities like the electronic mail World wide web (www) were put to use. Some potential

uses were suggested to include communication with lectures, with friends and relations in and outside Nigeria. Communication outside and inside the country and participation in

**Table 6: Use of World Wide Web**

|   |    |      |
|---|----|------|
| Entertainment of Sports                       | 32 | 16.6 |
| News  | 11 | 6.2  |
| General browsing                              | 12 | 6.2  |
| E-mail web server                             | 40 | 20.7 |
| Academic materials and other university sites | 48 | 24.9 |
| Other use                                     | 25 | 12.9 |
| Non use of www                                | 16 | 8.3  |
| No response                                   | 9  | 4.7  |

discussion groups). They were also given the option of indicating non-use of email and also to specify other uses. See table 5.

#### Use of the Internet

44% of the responders used the email to communicate with friends and relatives. 21.4 of them used it to communicate with fellow students. On the other hand, majority of the www users (24.9%) used it for searching for academic materials and visiting other university sites. (see details in table 6). This may be due to the fact that they were all university students. Noteworthy is that 8.3% did not surf the web at all. This may be because they are not aware of the immense help they can get from it for their studies or they may not have the skill to do so.

**Table 7: Favourite Search Engine**

| Search Engine        | No. of Response | %    |
|----------------------|-----------------|------|
| Yahoo                | 89              | 46.1 |
| Netscape             | 43              | 22.3 |
| Excite Alta visa     | 45              | 23.3 |
| Info seek            | 4               | 2.1  |
| Info seek            | 2               | 1    |
| Lycos                | 1               | 0.5  |
| Ito + bot            | 1               | 0.5  |
| Web crawler          | 2               | 1    |
| Who where            | 1               | 0.5  |
| No. favourite engine | 3               | 1.5  |
| No response          | 2               | 1    |

Lastly, the respondents were asked to tick their favourite internet search engines. Table 7 depicts the list of search engines used by these students. Yahoo, Excite and Netscape topped the list with 46.1, 23.3 and 22.3% of use by the respondents.

The students were asked to rank their single major inhibitor in the use of the Internet facilities. Those given are few computers with internet facilities, 66(34.2%) constant disconnection of the computer from the internet due to poor phone lines 50 (25.9%) very little time allocation internet use 32 (16.6%), insufficient training in the use of the internet facilities slow loading from the internet 23 (11.9%).

#### Suggestions and Comments from respondents.

The respondents were asked to make suggestions on the best way to solve the problems catalogued by them. Many (29%) suggested that the Medical Library make use of wireless Internet consecutively. Some others 25% wanted a regularly Internet training which is to be organised by the Internet staff free of charge for them. Others (21%) wanted a constant power

supply supported by a Generating set and 7% wanted service free of charge. 5% wanted more personal computers in the network, and another 5% more wanted browsing time to increase from 15 minutes to 1 hour per user.

### Conclusion and Recommendation

1. This study has revealed that the use of the Internet service in the Medical Library of College of Medicine of the University of Lagos is popular. However, it is besieged by problems such as inadequate PCs, poor phone lines as well as constant power outages. In addition to this since the services is mainly for the community it may be necessary to review the price downward or at least not use the service as a money making venture so that the community will benefit from it. This will also serve the purpose for which The Christopher Kolade Foundation donated the facility to the community in the first place. There is also urgent need for the libraries to take advantage of the fact that it is situated at the librarians to organize a regular training for those who are interested. This could also be incorporated into the **library orientation** course as well as the library studies in the **General African Studies Course GAS**. This will be in line with the new trend among librarians (Fenton-SJ 1997) and Kellerman et al (2001), who opined that "how to access the Web and evaluate the information on the web will become an essential skill for librarians to teach" The computer laboratory which exists in the same floor of the library **could be merged with the Internet service so that the number of personal computers with Internet access will be increased.**

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