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Effect of Liservices on Medical Students Skills on Evidence-Based Learning

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7 Abstract

8 This empirical survey examines the effect of Liservices on medical students? skill in

⁹ evidence-based education. The objectives of the study were to evaluate the activities of

¹⁰ medical students when using library resources, to determine the purpose for using the library

¹¹ services, to find out the sources most frequently used for current information, and to find out

¹² the category of medical students (basic or clinical) who use the library most. Seven hundred

and eleven (711) medical students. This sample comprised of 394 males and 317 females and

¹⁴ were in Basic (Parts 2-4) and Clinicals (Parts 5-6) at the time of conducting this research. A

15 systematic random sampling technique was used to select the respondents from various

¹⁶ Medical Schools in Nigeria. The use of questionnaire technique was adopted to elicit

¹⁷ information from the students who came to use their institutional libraries. The results show

¹⁸ that medical students most frequently visited the library for the purpose of accessing e-library

¹⁹ and OPAC. Majority of the respondents relied on library e-resources while some still depended

on textbooks. Those in the Basic Medical Class rely heavily on e-resources for current information than those in the Clinical class. It is recommended that Advanced library

information than those in the Clinical class. It is recommended that Advanced library instruction programme should be incorporated into the curriculum of the Clinical Students

where the use of e-resources and information technology will be taught.

24

25 Index terms—

²⁶ 1 Introduction

iomedical science is one of the fields where the expansion of information is enormous and which is critically 27 dependent on up-to-date information. This factor has influenced the implementation of evidence-based learning 28 (EBL) approach in the medical education. Information explosion has resulted in a change in the delivery of 29 medical education and the shift from traditional educative approaches to a non-didactic problem based philosophy 30 a strategy by which both students and teachers can cope with and hopefully manage the ever-expanding field of 31 information (Smith, 2002; Epstein 2004). In the lecture-based convention teaching, students are passive recipients 32 of information whereas in an evidence-based learning curriculum they are active participants in the learning 33 process with emphasis on the use of the library and its resources. They are expected to use different learning 34 35 resources to collect relevant information and literature for their study.

With such emphasis on information gathering and evaluation, the use of the library becomes a dynamic powerful learning resource for the students. Thus, for students to achieve their self-directed learning targets in the evidence-based learning curriculum they would be expected to make good use of the library and its e-resources Library plays a vital role in any knowledge economy and it plays a central importance in education and research as well as in the delivery of clinical care and the management of clinical services. Library services also focus on provide crucial and significant support early in the research paradigm.

The digital information world, the growth of knowledge and the increasing specialization of every health and health services field, the potential gap between new science and service world, and the ever changing role facing library professionals are all ingredients in a recipe for either confusion and with opportunity, or a new and better way of benefitting the students. We are building on success, and it is time to accelerate change and secure further successes. It is easy for people to take librarians and library services for granted, to assume that they will always be there like they always have been there, but of course the Internet changes everything in the knowledge

⁴⁸ business-changes apart from the need to have well qualified and motivated professionals who understand the⁴⁹ needs of users.

50 Walzer, ??tott & Sulton (2000: 262) in their earlier study highlighted some roles of the medical library as:

? Provision of current quick and cost effective information to users. ? Provision of alternatives to formal learning in form of material support for continuing medical education. ? Locating and assisting in the development of relevant information or materials. There are two major challenges facing the librarians; rapid growth in information technology and the growing population of students, many of whom lack access to relevant information and appropriate technological skills technology ??Fairlie, 2005). These challenges are particularly significant for librarians as? information providers and have led to the emergence of the key roles of the library leadership and? and vision, strategy, partnership development and problem solving.

The challenge for librarians is to demonstrate that the services they provide actively support clinical care (teaching, learning and research). They should organize a programme to systematize and unify initiatives, such as current awareness services that will lead to achieve consistency, efficiency and economic scale. Library must be made a place for reflection, quiet contemplation and working undisturbed, a point of access to technology (Internet access, virtual space) and a place for training and the library as learning enabler.

A good library services need to have a number of these characteristics. Blummer (2007) reiterate the use of 63 evidencebased learning in higher education as affording librarians new avenues for promoting the development of 64 information literacy skills among students. It supports providing students with skills to locate relevant resources 65 for developing solutions to these exercises. Omekwu (2006) observes that information technology and library 66 services provide platform to access, interpret and apply impact positively on productivity of medical professionals. 67 Watts and Ibegbulam (2006) highlight the importance of e-information sources as enabling users to gain access 68 to and use the specific information that students need.? Quality assured ? Responsive ? Open to all ? Efficient 69 ? Flexible ? Committed to 70

71 With such emphasis on library and information technology as a dynamic powerful learning resource for the 72 students, it is imperative therefore, for the university medical libraries, for easy access to information students 73 were provided Internet facilities and e-libraries which are been effectively explored by staff and students of their 74 faculties.

75 **2** II.

76 **3** Purpose of Study

77 The objectives of the study are to:

1. Determine usability of the library services by Medical Students 2. Find out the influence of library use on evidencebased learning in medical training. 3. To determine degree of satisfaction of medical students with respect to library services.

⁸¹ 4 III. istorical ackground

Medical education started in Nigeria with the establishment of the University College, Ibadan in 1948 (Now University of Ibadan that consequently established University College Hospital (UCH), Ibadan which started the training of Medical doctors. In 1962 another four universities were established by the Government which did not start her medical schools until 1970. Today, these medical schools have many faculties consisting of several departments. The curriculum is divided into three phases: a pre-medical (100 level/year), a three year (200-400 levels). Basic medical sciences and a two year clinical science (500-600 level/year. In the three learning phases courses are mostly taught in the conventional way.

89 IV.

90 5 Methodology

91 The focus of the study is effect of liservices on medical students' skills in evidence-based learning. It is essential 92 to evaluate the impact of the library services in line with medical school curriculum. The researcher selected 93 medical students from four University Medical Schools in Nigeria. The universities were University of Ibadan 94 (U.I), Ibadan; Ogun State University, Ago-Iwoye; University of Lagos, Lagos and Obafemi Awolowo University, 95 Ile-Ife. These Universities are located in the South-West of the country. For the purpose of this study, only 96 medical students in levels 200-600 were selected. The respondents were grouped into two Basics (200-400 levels) 97 and Clinicals (500-600 levels).

A total of seven hundred and eleven (711) medical students comprising of 394 males and 317 females were sampled. Questionnaires were distributed to those who came to make use of their Institutional library facilities. A systematic random sampling technique was used to distribute the questionnaire at the main entrance of the library. The respondents were selected at an alternating interval of five students coming to the library. 102 V.

¹⁰³ 6 Result and Finding

Out of seven hundred and eleven (711) questionnaires distributed to students, 485 (68.2%) were returned and 104 analysed. This comprised of 130 (26.8%) second year, 114 (23.5%) third year, 100 (20.6%) fourth year, 78 (16.1%) 105 in fifth year and 63 (13.0%) six year. Two hundred and fifty-eight (53.2%) were males while two hundred and 106 twenty-seven (46.8%) were females. Six hundred and thirty-five (89.3%) held no previous undergraduate degree, 107 51 (7.2%) held Bachelor of Science Degree and 25 (3.5%) held the Master of Science Degree. Nearly 78 percent of 108 the students had undergone Library Instruction Programme (LIB 001), while others had received some form of 109 library orientation. Most students use e-resources weekly for the purpose of seeking information for course work. 110 More than half, however use e-resources for literature search. While almost 50 percent use e-mail on weekly 111 basis. It is a good thing that students realize the importance of library services provided in the library through 112 electronic resources. This result conforms with Khudair (2005) that medical students are enthusiastic about using 113 the Internet for it is easy to use, fast communication features and provide current and relevant information in a 114 timely manner from a multiple sources. 115

116 7 Students

¹¹⁷ In order to locate current information, 56.9 percent of the respondents indicate using electronic resources.

Students in year 2 used e-resources, even year of the response of the response of the second deduced for less usage by the clinical students is because of their clinical posting during which they spend most of their time in clinical areas (wards). Nearly 80 percent of the respondents agree that evidence-based education will not be effective without ability to access and retrieve information from the internet and other e-resources. The wide range of information required for medical education does not lend itself to a narrow information base. Marchionen (1995) reveals that information seeking is a mental human process closely related to learning and

124 problem solving.

125 8 Library Related Activities

Students were requested to tick on a checklist the frequency with which they engaged in several library activities. Table 1 shows that the most frequent use of Library (defined as daily and 2-4 times per week) was for electroniclibrary and Online Public Access Catalogue (OPAC). Seeking information for reference books, past question file and studying course work were frequently engaged in them. The result indicated good patronage of the library

130 and its resources.

¹³¹ 9 ICT Facilities Recommended by the Students

132 10 Facilities

Responses Percentage The respondents were asked to make their recommendation about ICT facilities in their libraries. Three quarters (75%) of students recommended digital library facility.

More than 60 percent recommended provision of more e-resources and almost equal number recommended

library website for remote access to library resources and services. Networking with other medical libraries was
deemed very important as no one library can have all the books, journals and other materials that users need.
VIII.

¹³⁹ 11 Degree of Satisfaction of Library Services

The respondents were requested to rate their degree of satisfaction with library services and facilities provided. It is not surprising that 73.6 percent of the students indicated their satisfaction while 12.4 percent were partially satisfied. A small size (14.0%) percent were not satisfied and the remaining 1.0 percent cannot decide whether they were satisfied or not. The finding is as a result of frantic effort each university libraries are making to be IT complaint because of this a lot of money are been spent on automation of the library operation in order to

145 serve library users better.

146 **12** Major Findings

147 After an analysis and interpretation of data, the following findings were observed:

More than 75% of the respondents came to library to use e-library and Online Public Access Catalogue
 (OPAC) most frequently. 2. Majority (58.1%) use electronic resources of the library for the purpose of seeking
 information for course work and 56.9 percent for literature search.

3. Respondents in parts 2 to part 4 use e-resources more for current information than those in senior classes
(part 5 & 6). 4. 75.9 percent of respondents recommended provision of more digital library facilities. 5. Electronic
library and e-resources were considered very important by respondents for expanding the frontiers of knowledge

in medical education. 6. 73.6 percent of respondent expressed their satisfaction with services available in the

155 library even though they are advocating for more electronic formats.

156 13 X. onclusion

From the analysis and findings of this study, it can be inferred that medical students are aware that library is a useful tool that provides students with a wide range of services that can address problems in evidence-based education. Some of the respondents note:

¹⁶⁰ "Using library and its resources has helped me to submit my class assignments to time because of easy and ¹⁶¹ fast access to manyliterature".

¹⁶² "Using library has equipped my skills in evidence-based learningbecause it has exposed me to analytical ¹⁶³ thinking consequently improved my academic performance".

The study reveals that medical students are making effective use of the library and the indelible marks its making in the education of medical students. Electronic resources can be used in developing skills in evidencebased learning, but lack of skills in IT and e-resources is still a bare. It is important to mention that some of the problems faced by medical libraries in meeting the needs of the library users are eratic electricity supply, low bandwidth and low level of computer competency of the students. Another finding from the study is lack of cooperation among the medical libraries, interlibrary loan is unpopular. It is the view of this paper that these

¹⁷⁰ identified problems must be urgently addressed so as to help students maximally access vast available medical information in the electronic formats. ¹







Figure 2: Figure 1 :

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Figure 3: Clinicals

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Activity		Fre	Frequency of Response $(\%)$	
	Da	ily 2-4	Times/Week Once/We	ek None
Electronic library	49	87	40	2
Online public access catalogue (OPAC)	56	75	33	10
Reference books	8	45	61	4
Past question file	7	36	25	23
Studying course work	6	32	36	14
Seeking information for course work	3	24	60	7
Seeking information for research	6	9	32	53
VII. Student Activities in the Library				
Ta ble 2 : Purpose and frequency of e-re	esource use			
Purpose	Daily	Weekly	Monthly Occasi	ionally Never
Literature search	30(6.2%)	276(56.9%)	101(20.8%)21(4.3	%) 5(1.0%)
Information on patient	40(8.2%)	167(34.4%)	156(32.2%)75(15.	5%) 7(1.4%)
E-mail	96(19.8%)	231(47.6%)	$81(16.7\%) \ 11(2.3$	$\%) \qquad 6(1.2\%)$
Seeking information for course work	67(13.8%)	285(58.1%)	$125(25.8\%)\!\!8(1.6\%)$	(0.2%) 1(0.2%)
Chat	52(10.7%)	183(37.7%)	138(28.5%)13(2.7	%) 4(0.8%)

Figure 4: Table 1 :

13 X. ONCLUSION

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