KNOWLEDGE AND PRACTICE OF USE OF DIGITAL RESOURCES BY FACULTY MEMBERS AT BLDE UNIVERSITY, VIJAYAPUR. KARNATAKA INDIA

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Abstract

Digital resources are growing day by day. Users are also adapting information in digital form, because of their qualities like, easy to access, download, retrospective or current information access, transfer, etc. Educational institutions are also investing on digital information resources. Medical institutions are moving towards digital resource collection. The present study investigates the awareness and use of digital resources by faculty members of BLDE University, Vijayapur. Karnataka, India. It is based on the survey of 134 faculty members. This study emphasizes on the knowledge and practice of the use of digital resources, majorly used digital resources, the purpose of using digital resources and level of satisfaction about the library digital resources collection and services.

Keywords: Digital Resources, Medical Library, User study, Information Technology, BLDE University

Introduction

The evolutional changes in computer and communication technology have drastically increased the information generation and utilization of digital content. The gap between the information generation and its utilization has been reduced. Present libraries are more used behind their walls. Digital resources have reached the fingertips of users in their convenient places. Donald AB Lindberg in his study in 2005 said that, "By 2015, many publications are issued only in electronic form, thousands of back runs of journals have now been digitized, and electronic copies of books, manuscripts, and images abound" (1). It has come to reality. Now many resources, like books, journals, etc. are being published in digital form and hard copies are steadily digitizing.

Today, the internet can be said as the largest library. In the medical field, the integration of online libraries with the epidemiology information systems could favour the medical

professionals in fulfilling the unaware information needs. Hence, libraries are playing important role in the continuing medical education. As per the L D Fiore "the Internet is no longer a library, but an information ecosystem where the data are transformed into knowledge by sharing and discussion"(2).

BLDE University, Vijayapur, Karnataka, India

BLDE University was established as a deemed university under section 3 of the UGC Act, 1956(3). The Constituent College of the University, Shri B M Patil Medical College Hospital & Research Centre, Bijapur, Karnataka, India. was established in the year 1986 by BLDE Association (Bijapur Liberal District Educational Association). The college is recognized by Medical Council of India and undergraduate course is recognized by Sri Lankan Medical Council. The college is enlisted in the WHO directory of medical schools and IMED FAIMER. The annual intake is 150 Under Graduate, 28 Degrees and 16 Diplomas (in all 44) Post Graduate seats, Post Graduate courses in 14 Departments(4).

Central Library

The Central Library was established in the year 1986. It is serving as a resource center for the health science information.   The library's primary clientele are the institution's faculty, research scholars, students, and staff. Its collection included both print and digital resources.   Library's Print resources include books, journals, dissertations, thesis and back volumes of journals. Digital resources include books, journals, HELINET consortium resources and institutional repository with dissertations, previous year question papers, faculty published articles, university news bulletin and open access resources directory.

Review of Literature

The developments in the field of digital technology have brought drastic changes in the information processing, storage and retrieval techniques, especially in higher education system, including medical education.

Ellis and Oldman (5) noted that "through the use of electronic resources, researchers and students; now have access to global information resources, particularly the Internet for their scholarly communication". On higher education institutions, a number of studies have been conducted to know the digital resources usage pattern by students and faculty. These study reports reveals that the internet resources usage is very high (6)(7).

The increase in digital resources usage is affected by its features, like open access, easy to use, reduced time gap between information generations to its utilization, etc. "The ability to find and retrieve information effectively is a transferable skill useful for future life and for enabling the positive and successful use of the electronic resources for students whilst at university"(8).

Tenopir (9) has conducted review of literature published in between 1995 to 2003 on the topic use of digital resources in libraries. He has reviewed around 200 studies. The main findings of his study is, the digital resources are fairly used in the academic field.

Kaanungo, Neena Talwar (10) study reveals that, "the 91% of the social scientists find internet as an important tool of research. Internet as a medium offers rich possibilities to enhance serious research and teaching by diverse sociologists. Internet has indeed become a communication medium for enhancing teaching, research and professional development for social scientist in the open distances heaving environment".

Asemi and Reyahiniya (11) carried out a study on awareness and use of digital resources in the libraries of Isfahan University of Medical Science, Iran. Their study reveals that the greater part of the students is aware of digital databases and resources available in the library and using the digital resources with any difficulties. The awareness about the IT facilities in the library will enhance the usage of digital resources.

The study conducted by Md. Sohail and Andleeb Alvi (12) on Use of Web Resources by Medical Science Students of Aligarh Muslim University reveals that 76.08% of students find web resources as a reliable source. Mahabaleshwar Rao Baikady (13) in his study stated PUBMED / Medline is the most widely used bibliographic databases. Gavisiddappa Anandhalli (14) found in his studies online medical bibliographical databases and CDROM databases were extensively used e-resources by the users of medical libraries.

Objectives of the study

- To examine the awareness about digital resources
- To find out level of use of digital resources
- To trace the purpose of use of digital resources
- To identify the experience of using digital resources
- To find out the major digital resources used
- To find out the level of satisfaction about the library resources

Methodology

This study is based on the survey method. A structured questionnaire was designed to collect the data from the faculty members of BLDE University's Shri B M Patil Medical College, Hospital & Research Centre, Vijayapur Karnataka. The questionnaires were distributed among faculties of all the departments. Out of 249 questionnaires distributed, 134 valid questionnaires were collected.

Analysis of data

The main purpose of this study is to find out the level of awareness and usage of digital resources by the faculty of this institute. The study population is stratified as preclinical, para clinical and clinical departments. The departments come under preclinical are anatomy, physiology and biochemistry. Para clinical strata includes the departments - pathology, microbiology, pharmacology, forensic medicine and community medicine; and the clinical strata includes the remaining all departments, i.e. medicine, orthopedics,

surgery, radiology, anesthesia, pediatrics, Obstetrics and Gynecology, ENT, Ophthalmology and other super speciality departments.

The questionnaire was distributed to all the faculty members (249) of the university. Out of which 134 (53.81%) faculty has responded. Out of 134 faculty, 28 are preclinical, 20 paraclinical and 86 clinical department faculties. The collected data was processed for analysis and interpretation.

Major digital resources available in medical field are, e-Books, e-Journals, bibliographic Databases - MEDLINE / PUBMED, CINHAL, IndMed, WorldCat, full-text Databases - PUBMED Central, MedInd, Cochrane Library, NLM databases, Proquest, Science Direct, Wiley online library, MD Consult, Open J-gate, E-Thesis and Dissertations, Institutional Repositories (IRs), Image Databases (Image.MD, NLM Medical Image databases), E-Discussion forums and newsgroup, library web-portals, abstracting and Indexing databases - biological abstracts, POPLINE, Scopus, Chemical Abstracts, consortium's resources – HELINET, ERMED, National Medical Library Consortium, EBSCO Publishing, JCCC@ICMR, HINARI.

Statistical analysis

Data were presented using tables and percentages.

Table 1: Age group of the respondents

Age	Respondents (n=134)	%
<30	15	11.19
30-40	68	50.75
40-50	33	24.63
50-60	12	8.95
>60	6	4.48

Table 1 reveals that out of 134 respondents, 15 (11.19%) are belong to less than 30 age groups, 68 (50.75%) belongs to 30-40 age group, 33 (24.63%) belongs to 40-50 age group, 12 (8.95%) belongs to 50-60 age group and 6 (4.48%) belongs to above 60 age group.

Table 2: Gender wise number of respondents

Gender	Respondents (n=134)	%
Male	78	58.21
Female	56	41.79

Table 2 reveals that, out of 134 respondents 78 (58.21%) are male and 56 (41.79%) are female respondents.

Table 3: Frequency of visit to library by faculty

Visit	Respondents (n=134)	%
Daily	11	8.21
Weekly	42	31.34
Fortnightly	15	11.19
Monthly	9	6.72
Occasionally	57	42.54

The table 3 reveals that the frequency of use of the library either for use of digital resources or print resources. Out of the total respondents 11 (8.21%) faculties use the library daily, 42 (31.34%) are using weekly, 15 (11.19% are using fortnightly, 9 (6.72%) are using monthly and majority of using the library very occasionally, i.e 57 (42.54%) faculty.

Table 4: Purpose of visiting library

Purpose	Respondents (n=134)	%
Refer Books / journals	114	85.08%
Borrow Books / journals	76	56.72%
Consult Reference sources	48	35.82%
Refer non-medical Books	6	4.48%
Read News paper	43	32.09%
Use e-journals	53	39.55%
Use e-books	29	21.64%
Use e-databases	19	14.18%
Use consortium resources	15	11.19%
Use CD-ROMs	2	1.49%

The table 4 shows that the majority of the faculty is visiting the library to use print resources, i.e. refer / borrow books or journals, consult reference sources and read newspapers. More user's purpose, of visiting the library is to refer and borrow the books or journals. In digital resource usage, the majority of the faculty is visiting the library to e-journals (39.55%). CD_ROMs are very less used digital resources (1.49%).

Table 5: Experience of using digital resources

Experience	Respondents (n=134)	%
Six months	14	10.45
One year	11	8.21
Two years	42	31.34
> Two yrs	67	50

The table 5 reveals 67 (50%) faculty are using digital resources for more than two years and 42 (31.34%) since two years, 11 (8.21%) since one year and 14 (10.45%) are using for six months.

<p align="center">Table 6: Purpose of using digital resources</p>

Purpose	Respondents (n=134)	%
To keep abreast of latest developments	111	83.84%
To write Research Papers	108	80.60%
To Know similar works	83	61.94%
Access full text articles	96	71.64%
Search bibliographic information	67	50%

The table 6 shows that the purpose of using digital resources, 111 (83.84%) of the faculty uses the digital resources to keep abreast of the latest developments in their area of interest. 108(80.60%) of faculty is using digital resources to write research papers. To know the similar works in their area of interest 83 (61.94%) faculty is using digital resources. To access the full text articles 96 (71.64%) and 67 (50%) of faculty to search the bibliographical information.

<p align="center">Table 7: Extent of digital resource awareness and usage</p>

Sl. No.	Digital Resources	Awareness (n=134)	%	Usage (n=134)	%
1	E-Books	129	97	129	97
2	E-Journals	134	100	130	97
3	Bibliographic Databases				
	i. MEDLINE / PUBMED	134	100	125	93.3
	ii. CINHAL	66	49.3	63	47
	iii. IndMed	75	56	68	50.8
	iv. WorldCat	56	41.8	15	20.1
4	Full-text Databases				
	i. PUBMED Central	123	91.8	123	91.8
	ii. MedInd	81	60.5	80	59.7
	iii. Cochrane Library	84	62.7	79	59
	iv. NLM databases	82	61.2	52	38.8
	v. Proquest	61	45.5	50	37.3
	vi. Science Direct	83	61.9	55	41
	vii. Wiley Online Library	88	65.7	50	37.3

	viii. MD Consult	53	39.6	49	36.6
	ix. Open J-gate	46	34.3	39	29.1
5	Abstracting and Indexing databases				
	i. Biological Abstracts	71	53	5	3.73
	ii.POPLINE	58	43.3	0	0
	iii. Scopus	85	63.4	56	41.8
	iv. Chemical Abstracts	45	33.6	2	1.49
6	Consortium's resources:				
	i. HELINET	124	92.5	106	79.1
	ii. ERMED	58	43.3	0	0
	iii. National Medical Library Consortium	63	47	0	0
	iv. EBSCO Publishing	46	34.3	0	0
	v. JCCC@ICMR	40	35.1	0	0
	vi. HINARI	47	35.1	0	0
7	E-Thesis and Dissertations	104	77.6	98	73.1
8	Institutional Repositories (IRs)	61	45.5	55	41
9	Image Databases (ex. Image. MD, NLM Medical Image databases)	85	63.4	73	54.5
10	E-Discussion Forums & Newsgroups	84	62.7	35	26.1
11	Library web-portal	85	63.4	22	16.4

The table 7 reveals with regard to awareness and usage of digital resources. It is found that E-books (97%), e-journals (100%), PUBMED(100%), PUBMED Central(91.8%), HELINET (Health Sciences Library Network) Consortia (92.5%) are the resources having major awareness among the faculty members. Further, the same resources are used majorly. Some resources, like Biological Abstracts (3.73%), Popline, ERMED, National Medical Library, EBSCO Publishing, JCCC@ICMR, HINARI (0%, respectively), Chemical Abstracts (1.49%), Library Web Portal(16.4%) are very less used or not at all used by the faculty. This may be because of lack of awareness about the resources or library is not subscribing to it or no individual subscription.

Table 8: Level of satisfaction about availability of digital resources in the library

Level of satisfaction	Respondents (n=134)	%
Highly satisfied	9	7
Satisfied	84	63
Dissatisfied	25	18
Highly dissatisfied	9	7
Cannot say	7	5

Table 8 shows that, among the total respondents, 9 (7%) of them were highly satisfied with the digital resources available in the library, 84 (63%) are satisfied. A significant number of faculty 25 (18%) is dissatisfied with the availability of digital resources. The data revealed that 9 (7%) are highly dissatisfied and 7 (5%) do not know the level of satisfaction.

Findings of the study

Following are the observations made from this study:

- 50% of the respondents are using digital resources for more than two years.
- 83.84% of faculty are using digital resources to keep abreast of latest developments.
- Faculty have more awareness about E-books, E-journals MEDLINE / PUBMED, PUBMED Central, HELINET consortium. These resources are used by the faculty extensively.
- Faculty have less awareness about MD Consult, Open J-gate, EBSCO Publishing, JCCC@ICMR, CINHAL, WorldCat, Proquest, POPLINE, Chemical Abstracts, ERMED, National Medical Library Consortium, Institutional Repositories.
- Among the resources having less awareness are, either faculty do not have the knowledge about the resources or university is not subscribing it or personally they do not have the subscription.
- 70% of the responded faculty are satisfied about the digital resource collection in the library.

Suggestions

- Any library cannot possess all the resources. So, statewide / nationwide database of list of resources subscribed by medical colleges will help to some extent to refer the resources.
- Participation in different consortiums will help in overcoming the budget constraints to some extent.
- Orientations / Awareness programs / Workshops about the resources, which are having less awareness among the faculty, will help in increase of use of digital resources.

Conclusion

Though the Medical faculty is adopting digital resources and using them moderately for their information needs. Demand for updating their knowledge and provide better patient care remains constant. The effect of ICT and technological changes resulting increase in the volume of information in different directions and in different forms. Hence, faculty needs to transform themselves to use digital resources and update themselves. BLDE University's Shri B M Patil Medical College, Hospital and Research Centre is aiming high to develop digital resources collection and services.

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