
Familiarity and Use by the Students' of Digital Resources Available in the Academic Libraries of Medical Science University of Isfahan(MUI), Iran

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Abstract

An attempt has been made to determine the present status of familiarity and use of Digital resources. It was felt that use of digital resources is still poor among the medical students of the Universities in the developing countries. This paper presents survey to investigate the familiarity and use of Digital resources by students through online and offline Information Databases of the Central Library, "Central Library Books & Journals Database (CLBJD), and the CD-ROMs databases available in the academic libraries (MUI). The subjects of this study were the students of the Isfahan Medical University. For evaluating study questions and data collection, the questionnaire was distributed to a random sample of 250 students. The result of this survey are presented and discussed in the paper.

Keywords : Digital Resources, Electronic Resources, Academic Libraries, Isfahan Medical Science University (MUI), Iran

0. Introduction

Today, we live in exciting times. Digital resources, whose history spans a mere dozen years, will surely figure amongst the most important and influential institutions of this new century.

The information revolution not only supplies the technological horsepower that drives Digital resources, but fuels an unprecedented demand for storing, organizing, and accessing information. If information is the currency of the knowledge economy, Digital resources will be banks where they are invested (Hewitson, 2002).

There are more reasons today than ever before, which have necessitated students to use the Digital resources through the Central library Information Databases and the databases available in the academic libraries in MUI. Digital resources provide access to much richer content in a more structured manner and allow us to search for any word or phrase in the entire collection. The need is to provide online easy, ceaseless access, with multiple user access facility to electronic collections from researcher's desktop or from remote Internet computers. This saves the time of researchers in terms of access to online resources of his choice. Access to online E-journals is possible much before the library receives the journals in paper form. Electronic Document helps minimizing processing time for providing access to the users (Deb, Kar, and Kumar, 2003).

These are some of the reasons for the trust in the use of Digital resources by students. In order to exploit the current information explosion, familiarity and use of the Digital resources in the libraries for rapid development is necessary and important. Digital resources can be used for efficient retrieval and meeting information needs. This is very important for university libraries since most of them call for more and more research work. This important fact is convincing many libraries in Iran that computerization is no longer a thing of the past (Davaranah, 2001).

2. Objectives

This study was designed and carried out with the view to achieve the following objectives:

- ✍ To assess the amount of familiarity and use of the MUI students of the Digital resources through the central library online and offline information databases.
- ✍ To assess amount of familiarity and use of the MUI students to the “Central Library Books & Journals Database” accessible through Central Library LAN Network in the academic libraries in MUI and also accessible through central library homepage on the MUI website.
- ✍ To assess amount of familiarity and use of the MUI students of the Digital resources on CD-ROMs available in the academic libraries.
- ✍ To determine the percentage of students, who have had educational program about use of digital resources in MUI and also, indicate retrieval of students’ information needs via these resources.

3. Methodology

The study was conducted by survey method. The design of the study called for the MUI students as the subject. At the time of survey, based on the directory of MUI (MUI, 2003), there are 7 faculties and 7000 undergraduate and postgraduate students in this university.

In the Medical University of Isfahan there is a central library. In this study the use of three central library information and the CD-ROM databases available in the academic libraries by students was surveyed based on the following considerations:

In each faculty there is a library and these libraries are active in using various types of Digital resources on the CENT-LIB databases, databases on the CD-ROMs, floppy discs and etc.

These are three kinds’ Digital resources on the CENT-LIB network in MUI. These Digital resources include:

- ✍ Online databases accessible through MUI website.
- ✍ Offline databases available through CENT-LIB LAN Network. These databases are accessible in the university campus and in the faculty libraries and Alzahra hospital library, only.
- ✍ “Central Library Journals and Books Database” available on the Central Library homepage and CENT-LIB LAN Network.

Questionnaire technique was used for collecting data from users. The questionnaire was distributed to a random sample of 250 students for measuring their familiarity and use of Digital resources.

Survey of literature, personal visits, interviews, field observation, and opinions of experts of library professionals were considered. Documents and records available in the libraries related to the subject were referred. Thus measurement & quantification, questionnaire, and interviews were used as the research instruments in this study.

The data thus collected have been analyzed, classified and tabulated for representation in the paper. The graphical soft wares and statistical methods employed in the study were basically the Excel, SPSS.

4. Results and discussion

Online databases available on the MUI website are:

Springer Journals, Oxford Journals, Ovid Journals, Ingenta, Proquest, Blackwell, Elsevier Science, EBM Review, Ovid Medline, ERL 5 Medline, MDC Consult, Up-to-date Software, Images- MD.

Offline databases available on the CENT-LIB LAN Network. These databases are accessible in the campus university and in the faculty libraries and Alzahra hospital library. Include:

Medline (Silver platter), LCB, ISA, ERIC, IPA, MELI, Serfile, CINAHL, Ulrich's, BIP.

"Central Library Journals and Books Database (CLJBD)" are available on the MUI website and CENT-LIB LAN Network.

4.1 Student's familiarity with Digital resources

The data analysis pertains to 250 students, 7 academic libraries and Central Library.

"Figure 1" Shows that maximum number of respondents were from Medicine College (35%) whereas minimum (2%) number of respondents were from Rehabilitation College. Of course distribution of questionnaires was based on random sample.

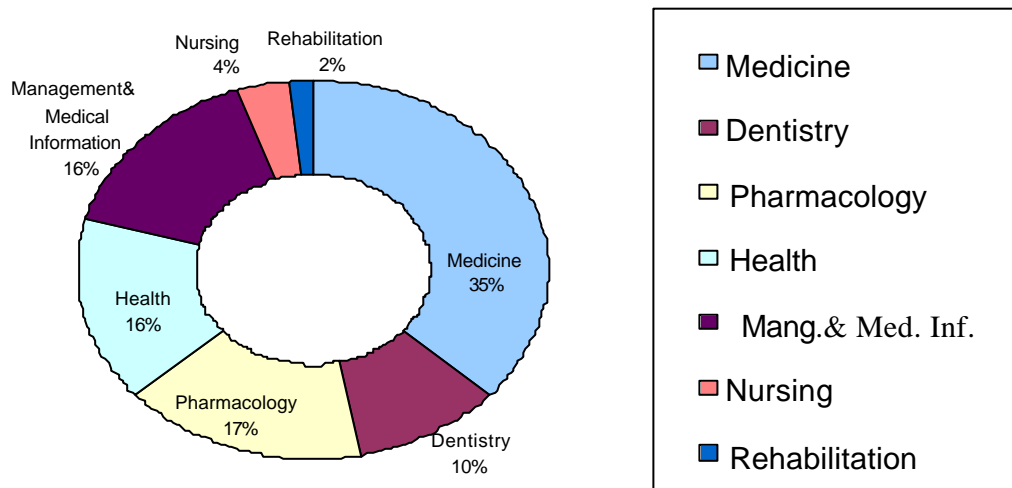


Figure 1. Percentage of despondences based on Colleges

“Figure 2” Shows maximum number of respondents were Master and MD students (53.4%) and minimum (6.9%) number of respondents were PhD and Associate students.

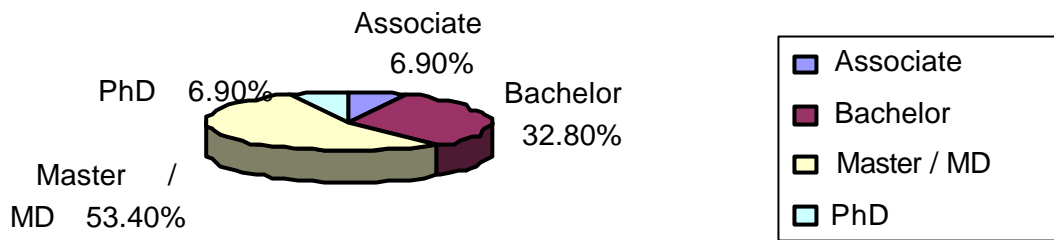


Figure 2. Percentage of respondents based on graduation

“Figure 3” shows that 31% of respondents were familiar to digital resources in academic libraries via personal communication. 19% of respondents via directories, 17% of them via library and 14% of them via other means. 47(19%) of respondents did not answer this question.

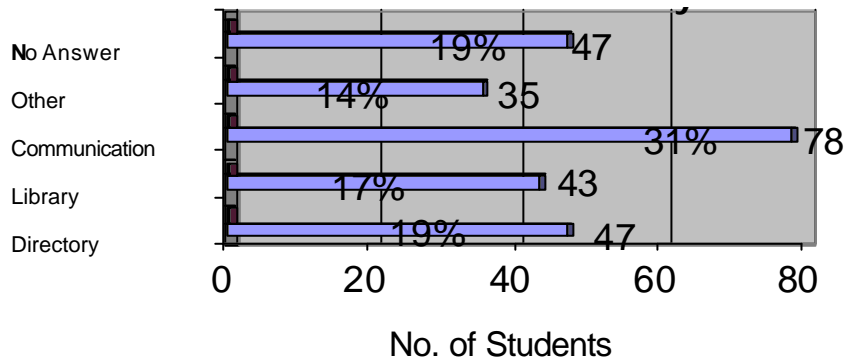


Figure 3. Quality of students familiarity with digital resources available in academic library

“Figure 4” shows that 175 (70%) of respondents are familiar with digital resources. 51 of them (20.4%) replied in negative saying that they are not familiar with digital resources. 24 students (9.6%) did not answer this question.

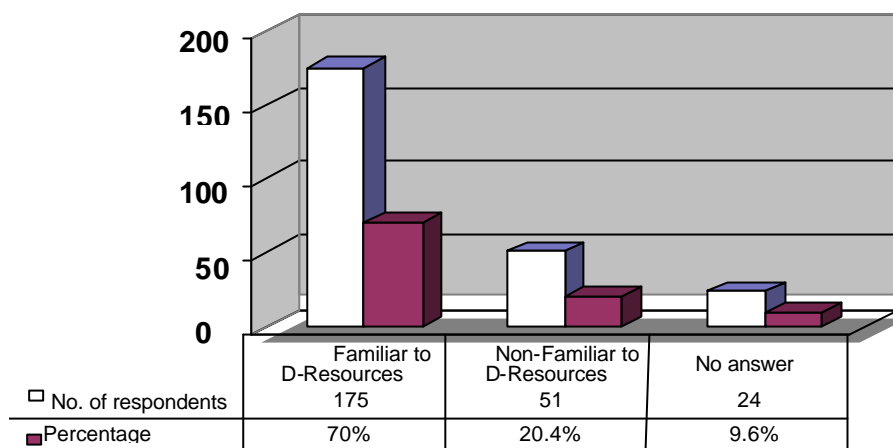


Figure 4. The familiarity of students with digital resources

"Table I" shows that 31.2% of the students are familiar with offline databases through CentLib LAN network in MUI. Familiarity of 22.8% of them to these databases is less. According to the data of this table 16.8% of students have less familiarity to online databases accessible through CentLib homepage and 27.2% of them are more familiar to these databases. 58 of the respondents (23.2%) are more familiar with "Central Library Books & Journals Database" through library homepage and 8.4% of students have less familiarity to this database. Also this table shows 30.4% of the students have less familiarity to CD-ROMs databases available in the academic libraries and 7.2% of them are more familiar to these databases. In total, 62% students have familiar to offline resources, 69.6% students to online resources, 50.8% students to CLBJ Database, and 43.6% of them have familiar to CD-ROM databases available in the academic libraries in MUI.

Table I. Amount of familiarity of the students to the kinds of Digital resources available in MUI

Resource kind	Less	Middle	Many	No answer
Offline Databases	57 People =22.8%	20 People=8% =8%	78 People =31.2%	95 People =38%
Online Databases	42 People =16.8%	64 People =25.6%	68 People =27.2%	76 People =30.4%
CLBJ Database	21 People =8.4%	78 People =31.28%	58 People =23.2%	93 People =37.2%
Resources on the CD-ROMs (available in the academic library)	76 People =30.4%	15 People =6%	18 People =7.2%	141 People =56.4%

Use by the students of Digital resources in academic libraries (MUI)

“Table II” shows that use of academic libraries by more than 32% of the students (82) is Fair. About 14% of the students (35) have less used these libraries quite less.

Table II. Amount use of the academic library and use of the digital resources by students in MUI

Amount of use Case	Less	More	Middle	Many	So many	No Answer
Use of Academic Library	35 People =13.8%	17 People =6.9%	82 People =32.8%	77 People =31%	39 People =15.5%	-----
Use of Digital Resources	30 People =12%	35 People =14%	17 People =6.8%	80 People =32%	12 People =4.8%	76 People =30.4%

Also, from the data of table 2 it can be observed that 32% of the respondents (80) have frequently used the digital resources in the academic libraries in MUI. 12 people of them (4.8%) have also used these resources. 76 respondents (30.4%) did not answer this question. In other word 174 students (69.6%) have used digital resources.

“How do you use the Digital resources, if you need them?” This is the question that we asked students. “Figure 5” shows that 48% of students, themselves use digital resources in the academic libraries (MUI). 32% of them have used these resources with librarian help. Also, this figure shows that 20% of students have used digital resources by other ways.

“Figure 6” indicates that 17% of the students have frequently used “Central Library Books & Journals Database”. 16% of the students have used this database less and 7% have used this database in mid range. This figure shows 4% of respondents have used Central Library Books & Journals Database through central library homepage to maximum extent and also 10% of the respondents have used this database to a large extent. 46% of the students did not answer this question.

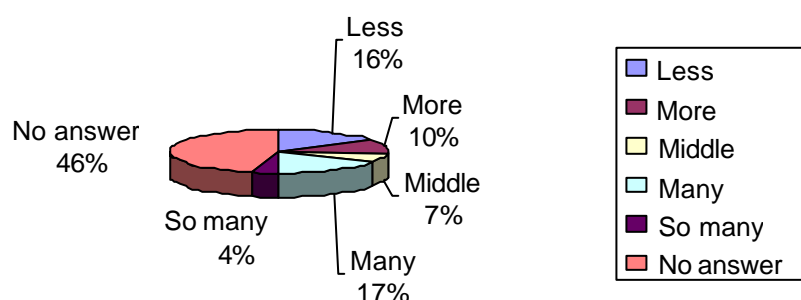


Figure 6. Percentage use of Central Library Books & Journals Database by the student

“Table III” shows usage of offline databases through Central Library LAN Network in the campus of MUI. The students have least used MELI database. Only 3% students have used MELI database. This database includes bibliographic information of the collection of the Iran National Library.

Table III. Amount of Use by the students of offline databases on the Central Library Network (MUI)

Database Name ↓	No. of Users	Percentage
Medline	187	74.8%
LCB	24	9.6%
ISA	35	14%
IPA	40	16%
ERIC	75	30%
MELI	7	2.8%
Serfile	13	5.2%
CAS	50	20%
BIP	14	5.6%
CINAHL	50	20%
Ulrich's	20	8%

It appears that almost 75% students' use Medline database through offline network of the central library.

After Medline database, about 30% students have used ERIC database. In fact, MEDLINE, ERIC, CAS, and CINAHL are databases which student use of them more than other offline databases.

As “Table IV” shows that online databases through central library homepage have been used more than offline databases. The students have least used Image-MD database. Almost 20% students have used Image-MD database. It appears that almost 85.5% students' use Ovid Journals database through online network of the central library. After Ovid Journals database, about 82% students have used Ovid Medline database. In fact, all of the online database which central library is subscribing, are used by students of MUI. In addition to Ovid Journals and Ovid Medline databases, Proquest, Elsevier Science, Springer Journals, Ingenta, and Blackwell databases have been used more than ERL5Medline, Oxford Journals, MDC-Consult, Up-to-Date, and Image MD online collection.

Table IV. Amount of Use online databases on the Central Library Network (MUI) by the students

Database Name	No. of Users	Percentage
Springer Journals	151	60.4%
Oxford Journals	87	34.8%
Ovid Journals	213	85.5%
Ingenta	153	61.2%
Proquest	202	80.8%
Blackwell	150	60%
Elsevier Science	176	70.4%
EBM Review	73	29.2%
Ovid Medline	204	81.6%
ERL5Medline	89	35.6%
Up-to-Date	63	25.2%
Image-MD	50	20%
MDC Consult	86	34.4%

“Did you have formal educational program about use of Digital resources in the library?” This was the question, which was asked to students. “Figure 7” shows, that 9% of respondents replied in affirmative while 74% said that they did not have any educational course about use of digital resources. 17% of respondents did not answer this question.

“Please indicate retrieval of your information needs via digital databases in the academic libraries in MUI?” This is the question that we asked students.

“Figure 8” indicates that 106 (42.4%) of the respondents thought that available digital resources met information needs of them at average level. The satisfaction level of information needs of 32 students (12.8%) was poor. 47 students (12.8%) replied in affirmative saying that they were satisfied with retrieval of them information needs of digital resources.

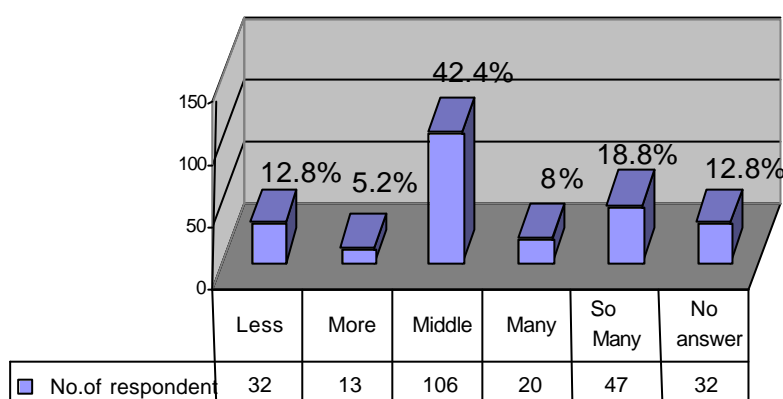


Figure 8. Amount of retrieval of users information needs via digital resources available in the academic libraries

32 students (12.8%) did not answer this question. On the average 218(87.2%) think that available digital resources meet their information needs.

Of the 250 students interviewed, 175 (70%) were aware of digital resources

(62%) were familiar with offline databases available through Central Library LAN in the academic libraries (MUI), 174 (69.6%) were familiar with Online databases accessible on the central library homepage, 160 (64%) were familiar with “CLBJD” accessible through Central Library LAN in the academic libraries in MUI and also accessible through central library homepage on the MUI website, 109 (43.6%) were familiar with CD-ROM databases available in the academic libraries.

All of the students (100%) had used academic libraries and only 173 (69 %) had used digital resources. More than half of the students i.e., 135 (54%) had used “CLBJ Database” accessible through Central Library LAN or Central Library homepage. Also on the average 18.72% had used all of the offline databases through Central Library LAN in the campus of Medical University of Isfahan (MUI). On the average 52.24% had used all of online database accessible through Central Library homepage on the MUI URL (<http://www.mui.ac.ir>).

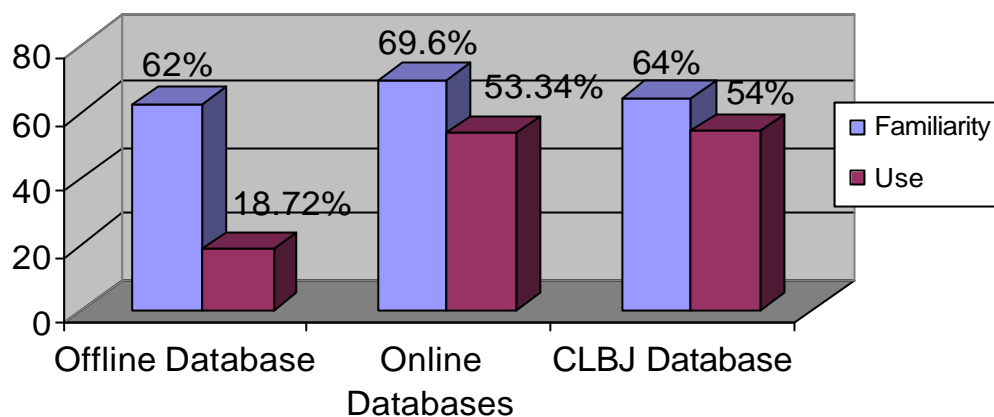


Figure 9. Compare between familiarity and use by students of digital resource in MUI

4.2 Discussion

Though the above factors, it was concluded that a relationship between the scales of familiarity and use of digital resources exists. The level of use by students as compared to their familiarity is good but the students have used poor of offline databases. The reasons for the little use of offline databases through Central Library LAN are multifactored. Poor use of these databases could be attributed to these critical underlying important factors: infrequent periodic orientation and education to use of offline databases by students, infrequent power of these databases on meet information needs of students. In other words these databases are poor in the retrieval information needs of the students, and infrequent of networked personal computers in the academic libraries, which should be connected to a central server in the Central Library.

It was therefore suggested that the offline databases on the Central Library LAN should be supported. The scale of students' familiarity with digital resources should be increased and that the staff of academic library should periodically train the preclinical and clinical medical students in searching available databases. These steps would enable the medical students to benefit from digital resources searching when it becomes fully operational in the future.

5. Conclusion

The difference between the scale of familiarity of the students with Digital resources and use of them available in the academic libraries (see "Figure 9"), and the relationship between the scale of students' use of Digital resources and scale of the retrieval of users information needs through D- Resources through the Central library Information Databases and the databases available in the academic libraries in MUI, have been discussed. The paper concludes that the use of digital resources by students are needed to solve the user problems. Also these resources need to carry up the level of user familiarity and literacy for use of them. Also, the paper concludes that the use of these resources in the academic libraries in MUI by students needs to have formal programme of educating course for users with special references to students (Ogunyade and Oyibo, 2003).

6. References

1. Chen, H. (2001). *Medical Text Mining: ADLI-2 Status Report*. India: Banglore.
2. Davarpanah, Mohammad Reza.(2001). Level of information technology application in Iranian university libraries. *Library Review*, 50, 9, 444-50.
3. Deb, Subrata, Kar, D. & Kumar, S. (2003). *Electronic Library: A Case Study With Reference to TERI*. India: Banglore.
4. Hersh, W. R., Detmer, W. M. & Frisse, M. E. (2000). *Information Retrieval systems*. Edward H. Short & Leslie E. Perreault. *Medical Informatics: Computer Applications in Health Care and Biomedicine*. Newyork: Springer.
5. Hewitson, Andrew. (2002). Use and awareness of electronic information services by academic staff at Leeds Metropolitan University -a qualitative study. *Journal of Librarianship and Information Science*, 34, 1, 43-52.
6. Hunt, R. H. & R. G. Newman. (1997). Medical Knowledge Overload: A disturbing trend for physicians. *Health Care Management Review*, 22, 1, 70-75.
7. Ogunyade, Taiwo O. & Wellington A. Oyibo. (2003). Use of CD-ROM MEDLINE by Medical Students of the College of Medicine, University of Lagos, Nigeria. *Journal of Medical Internet Research*, 5,1.
8. Peterson, Michael W & et al. (2004). Medical Students' Use of Information Resources: Is the Digital Age Dawning? . *Academic Medicine*, 79, 1, 89-95.
9. Sridhar, C. B.(2001). *Internet: Apower Full Tool Disseminating Medical Knowledge in Urban and Rural India..* India: Banglore.

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