

Use of E-Resources by Health Professionals: A Case study of Postgraduate Institute of Medical Education and Research Library, Chandigarh

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ABSTRACT

The advent of information communication technology revolutionized the concept of library resources allowing users to access information in electronic format as well. This paper focuses on the usage of E-Resources by health professionals of Postgraduate Institute of Medical Education and Research, Chandigarh. The awareness levels of these users regarding usage has also been tapped in this study. A questionnaire based survey on the use of E-Resources was conducted. The paper discusses various aspects of E-Resources in terms of usage, experience in using, time spend, place of accessing, purpose of use and problem faced in using E-Resources. The paper finally suggests remedies like improvement in information technology infrastructure, enhanced accessibility and users training & education for accelerating E-Resource usage.

1. Introduction

In old days, libraries were merely store houses where manuscripts, art works and important documents were kept. During 15th century, with the invention of printing press by Johann Gutenberg, the process of document publishing was revolutionized. With its impact, several new libraries came into existence. Library's collection then included books, periodicals, newspapers, manuscripts, films, maps, prints, documents available in physical format until the invention of ICT (Information and Communication Technology). With the advent of ICT, the concept of libraries changed from mere storehouses of books to well-organized library media centers with variety of resources available in electronic format also. For accessing these e-resources the users do not need to come to the library physically, he/she can access the resources of library via the Internet, from anywhere using mobile technology.

2. E-Resources

IFLA defines "Electronic Resources" as those resources that require computer access, whether a personal computer or handheld mobile device. They may either be accessed remotely via the Internet or locally. Some of the most frequently encountered types of E-Resources are: e-journals, e-books, Full-text databases (aggregated), Indexing and Abstracting databases, Reference databases, Numeric and Statistical databases, e-images, e-audio/visual resources.

3. An overview of Tulsidas Library, Postgraduate Institute of Medical Education and Research, Chandigarh (PGIMER)

Tulsidas library is the central part of academic, research and extension activities of the Postgraduate Institute of Medical Education and Research. The library has fully automated its operations using LSEase (Libsys) Library management software. The resources and databases of the library has been made accessible 24/7 online through Ebsco Discovery Service. The collection of the library is enriched with a rich array of

books, current journals, back volumes of journals, theses, video cassettes and CDROMs.

4. Review of Literature

Bhat and Mudhol (2014) conducted a survey on the use of e-resources by distributing 300 questionnaires to faculty members of Sher-E-Kashmir Institute of Medical Science. They found that the medical faculty members had a positive attitude towards the use of e-resources for keeping themselves up-to-date in their area of subject.

Chakrabarti and Kayal (2014) studied the use of different e-documents by the Master's Degree students of Calcutta University central library. It was found that there was a huge increase in the usage of e-documents and most of the students were aware about present ICT techniques.

Chopra and Partap (2014) in their work focused on the impact of ICT on Tulsidas library of Postgraduate Institute of Medical Education and Research, Chandigarh and found that library was well equipped with latest information communication technologies like e-resources, automation and Wi-Fi facility which are available in the library.

Jotwani (2014) focused on the trends of adoption of e-resources vis-a-vis print resources subscribed by Indian Institute of Technology (IITs) libraries and its usage from 2004 to 2011 and found manifold increase in the usage of e-resources in the past eight years.

Md. Sohail and Alvi (2014) conducted questionnaire based survey in the Aligarh Muslim University, Aligarh and it was found that most students felt that e-resources were reliable. Further, it was recorded that Medline and Science Direct were the most consulted e-resources by medical students.

Anarki and Babalhavaeji (2013) focused on the comparative study of ability of medical students in using e-resources from Integrated Digital Library (IDL) portal of Iran. The analysis found that the users lacked in-depth awareness

about IDL portal and the paper provided insight into the student's information needs and the problems they encountered while searching IDL portal.

Anasuya (2017) in the paper, entitled "Usage of Electronic resources by the medical, dental and paramedical science professionals in Karnataka" described the current status and use of electronic resources in the state of the Karnataka by students and faculty and it was found that e-resources are playing a major role in information dissemination process and these resources are being used widely.

Khursheed (2016) in his study focused upon the usage of library resources by medical students and faculty members of Integral University, Lucknow and found that the users rely more on Print resources of the library (books and journals) than e-resources. The study further found that library staff was cooperative and helped the users.

Ahmed and Al-Reyae (2017) in their paper entitled "Knowledge and use of electronic information resources by medical students of Al-Jouf University in Saudi Arabia" found that the overall knowledge and use of e-databases was higher among medical students than dental students. The study further revealed that the Under Graduate students of this University lacked in basic information literacy skills so there was a need to create awareness about e-resources among them.

5. Objective of the Study

- To study the present use of e-resources by fraternity of PGIMER, Chandigarh.
- To find the relationship of age and professional status of users with usage of e-resources.
- To suggest ways and means for maximizing the utilization of e-resources.
- To study the problems being faced by the users in accessing information using e-resources.

6. Scope of the Study

The proposed study intends to assess the satisfaction level of Students (Under Graduate and Post Graduate), Ph.D. Scholars and Doctors of Post Graduate Institute of Medical, Education and Research, Chandigarh with e-resources for meeting their information needs. The problems faced by users for accessing e-resources is also discussed. The study aims to provide an insight into the utilization of e-resources by fraternity of PGIMER, Chandigarh and suggest measures to maximize the use of e-resources by respective users.

7. Methodology

For the purpose of study, a sample of 100 people comprising under graduate and post graduate students, researchers and doctors of Post Graduate Institute of Medical Education and Research, Chandigarh were randomly selected. A survey was conducted using questionnaire as data collection tool to know the opinion of respondents about the need and importance of electronic information resources in the medical field. Out of the 100 questionnaires distributed, 80 duly filled questionnaires were received back and found suitable for analysis. The data have been analyzed using MS-Excel and Statistical Package for Social Sciences (SPSS) - 21. The descriptive statistical techniques have been used for interpreting data. Subsequently, the data was interpreted and relevant conclusions were drawn.

8. Analysis

8.1 Demographic details

Table 1 reveals that nearly 3/4th of the respondents comprised of males and remaining 26.25% are females. Around 86.84% of doctors, 68% of students and 52.94% of researchers are male respondents, whereas 47.06% researchers, 32% students and 13.16% doctors are females.

Table 1. Gender of respondents

S. No.	Gender	Doctors (Percentage)	Students (Percentage)	Research Scholars (Percentage)	Percentage
1.	Male	33 (86.84)	17 (68.00)	09 (52.94)	73.75
2.	Female	05 (13.16)	08 (32.00)	08 (47.06)	26.25
	Total	38	25	17	100

8.2 Frequency of the Internet Usage

The Study recorded that 81.3% health professionals use the Internet everyday for improving their skills, followed by 10 (12.5%) using the internet 2-3 time a week, 3 (3.8%) using the

Internet once a week. A single respondent makes rare use of the Internet facility. None of the respondents had chosen 2-3 times a month option.

Table 2. Frequency of internet usage

S. No.	Usage	Frequency	Percentage	Valid Percentage	Cumulative Percentage
1	Everyday	65	81.3	81.3	81.3
2	2-3 times a week	10	12.5	12.5	93.8
3	Once a week	3	3.8	3.8	97.5
5	Once in a month	1	1.3	1.3	98.8

6	Rarely	1	1.3	1.3	100.0
Total		80	100.0	100.0	

8.3 Experience in using e-resources

Out of 80 respondents 1/4th (25%) are using e-resources for more than 4 years. Around 21.3% users have experience of less than 4 years in using e-resources, followed by 20% health professionals with experience of less than 6 months. Nearly

18.8% are using e-resources for 6 months to 1 year and 15% have experience of using these resources for 1-2 years.

This data makes it clear that 46.3% respondents have experience in using e-resources for more than 2 years.

Table 3. Experience in using e-resources

S. No.	Experience	Frequency	Percentage	Valid Percentage	Cumulative Percentage
1	Less than 6 months	16	20.0	20.0	20.0
2	6 months to 1 year	15	18.8	18.8	38.8
3	1- 2 years	12	15.0	15.0	53.8
4	2- 4 years	17	21.3	21.3	75.0
5	More than 4 years	20	25.0	25.0	100.0
Total		80	100.0	100.0	

8.4 Frequency of e-resources use

It is evident from table 4 that 33.8% respondents use e-resources everyday followed by 20% using e-resources 2-3 time a day. Further, 17.5% health professionals use e-resources once in 2-3 weeks. Nearly 12.5% users use e-

resources once a week and 8.8% use e-resources once in a month while 7.5% use e-resources rarely.

The above statistics make it clear that majority of health professionals make use of e-resources frequently.

Table 4. Frequency of e-resources use

S. No.	Use	Frequency	Percentage	Valid Percentage	Cumulative Percentage
1	2-3 times a day	16	20.0	20.0	20.0
2	Everyday	27	33.8	33.8	53.8
3	2-3 times a week	14	17.5	17.5	71.3
4	Once a week	10	12.5	12.5	83.8
5	Once in a month	7	8.8	8.8	92.5
6	Rarely	6	7.5	7.5	100.0
Total		80	100.0	100.0	

8.5 Time spend to use e-resources

Table 5 represents the time spent by users for using e-resources per day on an average. About 43.8% respondents are using e-resources for 2-3 hours a day, followed by 38.8% using e-resources up an hour every day. Nearly 7.5% users

use e-resources for 5-7 hours a day, while 3.8% use it for 8-10 hours a day. Around 6.3% users use e-resources only a few minutes per day on an average.

Table 5. Time spend to use e-resources a day

S. No.	Time Spend	Frequency	Percentage	Valid Percentage	Cumulative Percentage
0	Only a few minutes	5	6.3	6.3	6.3
1	Upto 1 hour	31	38.8	38.8	45.0
2	2-4 hrs	35	43.8	43.8	88.8
3	5-7 hrs	6	7.5	7.5	96.3
4	8-10 hrs	3	3.8	3.8	100.0
Total		80	100.0	100.0	

8.6 Place of accessing e-resources

Table 6 depicts that the PGI Library is the most preferred place for accessing e-resources as 53.8% health professionals access these resources from the Library itself. This is followed

by 27.6% respondents accessing e-resources from respective departments. Around 15% users access e-resources from their home while 3.8% access e-resources from other places.

Table 6. Place of accessing e-resources

S. No.	Place	Frequency	Percentage	Valid Percentage	Cumulative Percentage
1	PGI Library	43	53.8	53.8	53.8
2	Department	22	27.6	27.6	81.3
3	Home	12	15.0	15.0	96.3
4	Other place	3	3.8	3.8	100.0
Total		80	100.0	100.0	

8.7 Learning about usage of e-resources

Table 7 depicts how the users learn about the usage of e-resources.

S. No.	Handling of e-resources	Frequency	Percentage	Valid Percentage	Cumulative Percentage
1	Library Orientation	4	5.0	5.0	5.0
2	Guidance from teacher	10	12.6	12.6	17.5
3	Friends	29	36.3	36.3	53.8
4	Hit and Trial Method	34	42.6	42.6	96.3
5	Other	3	3.8	3.8	100.0
Total		80	100.0	100.0	

It is obvious from table 7 that 42.6% respondents learnt about usage of e-resource by hit and trial method, followed by 36.3% who learnt to use e-resources from friends. About 12.6% health professionals learnt to use e-resources under the guidance of teachers. Only 5.0% users became familiar about usage of e-resources through library orientation, making it clear that there is a lack of initiative on part of the library and there is a need to create awareness about library resources.

8.8 Purpose of use

Table 8 shows that majority of health professionals (46.3%) use e-resources for research purpose. About 22.6% respondents use e-resources for entertainment, followed by 21.3% using these for education. Nearly 8.8% respondents use e-resources for improving general knowledge.

Table 8. Purpose of use

S. No.	Purpose	Frequency	Percentage	Valid Percentage	Cumulative Percentage
1	Education	17	21.3	21.3	21.3
2	Research	37	46.3	46.3	67.5
3	Entertainment	18	22.6	22.6	90.0
4	General Knowledge	7	8.8	8.8	98.8
5	Other	1	1.3	1.3	100.0
Total		80	100.0	100.0	

8.9 Devices used to access e-resources

Table 9 lists the devices used to access e-resources.

S. No.	Mode	Frequency	Percentage	Valid Percentage	Cumulative Percentage
1	Tablet	8	10.0	10.0	10.0
2	Mobile	13	16.3	16.3	26.3
3	Laptop	54	67.5	67.5	93.8
4	Digital Library	1	1.3	1.3	95.0
5	Other	4	5.1	5.1	100.0
Total		80	100.0	100.0	

It is evident from table 9 that more than 2/3rd of health professionals i.e. 67.5% access e-resources using their laptops. Nearly 16.3% respondents use mobile phones to access e-resources followed by 10% using tablets and 5.1% using other devices for this purpose. It is clear from above table that majority of users use their personal gadgets including laptop, mobile phones and tablets to access e-resources.

8.10 Problems faced by users in using e-resources

Out of total 80 respondents, 68.8% health professionals face problems in accessing information using e-resources, whereas remaining 31.2% responded otherwise. The problems faced by respondents are lack of time, slow speed of the Internet, lack of awareness, difficulty in finding relevant

information, overload of information, privacy problem, and analysis paralysis.

9. Suggestions

9.1 I.T. Infrastructure:

The I.T. infrastructure is a basic requirement to support use of e-resources including computer, routers and other connecting devices. Tulsidas Library has provided computers but these are limited in proportion to the users of this library. It is therefore suggested that the numbers of computers available for users should be increased.

In the current scenario, Wi-Fi facility is widely used for connecting to e-resources on laptop and tablets without using library computers. But in case of Tulsidas Library, it is found that Wi-Fi facility is only available on the ground floor of the library. Thus, it is suggested that Wi-Fi facility should be enhanced in the library.

9.2 Access:

In regard to access to e-resources, it is found that all the resources are authenticated via IP address and therefore, users cannot access the same outside the PGIMER, Chandigarh. It is suggested that the access to e-resources should also be provided outside the institute via password. This enables the users to access e-resources 24/7 without any physical restriction.

9.3 Training and User Education:

The study also found that 2/3 health professionals are facing varied problems in accessing e-resources in the library.

So, it is suggested to create awareness regarding the use of e-resources by holding user education and training programmes from time to time.

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10. Conclusion

E-resources, being relatively a new trend in the information world has generated a lot of debate over its access, shortage, preservation and copyright. Due to the infrastructure problem in the medical libraries in India, use and access to e-resources is very limited. Currently there is a shift towards e-resources, though the pace is quite slow and users are hesitant. The slow pace of usage is because of some hindrances faced while accessing them which includes slow downloading, lack of maintenance, lack of training and lack of infrastructure. But it is expected that e-resources will become more popular when each and every part of the country is connected with the world's information super highway.

Libraries in India are in a transition period, witnessing the prolific growth of resources in electronic form. Libraries which are already subscribing and those libraries which are planning to do so, should plan their acquisition, organize and manage e-resources properly so that their users can get the maximum benefit from such resources.

In a period of shrinking/stable library budgets and rising costs, it is important for academic libraries to understand the value of consortium. By participation in a consortium, libraries cannot ignore the e-resources, as is the case with PGI Library which is already a member of NML-ERMED consortia.

However, my study reveals that the use of e-resources at PGI Library is yet to get popular. It is required to create awareness among the users regarding e-resources by conducting user education and training programmes.