

# **Use of E-resources by the Users of the Gauhati Medical College and Hospital (GMCH), Guwahati: A Study**

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## **ABSTRACT**

**Purpose:** The present study is carried out to know the status of use of e-resources by the users of Gauhati Medical College and Hospital (GMCH), Guwahati, Assam. The aim of the study is to examine the use of various types of e-resources, purpose of use, frequency of access e-resources, use of medical e-databases, benefits of e-resources, problem faced while accessing information resources through online.

**Methodology:** For the study survey method is used with a well structured questionnaire as a tool for data collection. Questionnaires were distributed among faculty members and the students of the Gauhati Medical College and Hospital personally.

**Findings:** It has been found that that e-resource play a major role among the students and faculty members of the Gauhati Medical College and Hospitals. The study explore that most of users use e-resources for teaching and study purposes, they use Pubmed databases and prefer pdf. format during searching.

**Originality:** The paper is original research work of the author that is conducted on the basis of primary and secondary data collection through the questionnaire, which is limited to the users (faculty members and Students) of the GMCH, Gauhati.

**KEYWORDS:** ICT; E-resource; Medical database; Medical College; Search engine.

## **INTRODUCTION**

Due to the rapid development of Information technology and exponential growth of electronic information, there have been significant changes in Library services and also changes the need and demand of the library users. We all know that library is store house of books, periodicals manuscript, and other reading material, which are for used and preserved for future generation (Gupta & Sharma, 2016). But with the development of technology the traditional concept of libraries has changed and transformed the libraries into electronic libraries. Now a day's e-resources are available in various formats such as e- book, e- journal, e- magazine, e- research report, e- newspaper e- newsletter, & Dissertation, CD/ DVD- ROM etc.

To fulfil this ever increasing demand of the users, libraries should have adopted modern technology specially in the medical libraries, because medical professional always wants latest and high quality information for their patient care, diagnosis and treatment the patient with latest technology. “For the development of any country and society the medical education is very important. Medical students, doctors and faculties are using electronic resources for updating their knowledge, for academics and for social communication” (Kishore & Padmaja, 2017).

## **LITERATURE REVIEW**

There are huge numbers of significant studies on the use of e-resources in all types of academic institutions. Some of the recent studies, which are related to this article, are reviewed here.

**Gupta<sup>3</sup> & Sharma (2014)** in their article they revealed that that majority of respondents visit the library to make use of the available resources. The majority of respondents of IITs prefer to use Print and Digital resources for their study and research and aware about digital information resources. From their article it is found that the majority of respondents from IIT Kanpur and Kharagpur consider the digital information resources and services are important for their studies and research and users use digital information resources is to get the study material. The study shows that the majority of respondents of the IITs are satisfied with the available digital information resources and services but still some of the respondents feel that it is not easy to access the information using digital resources and services. From the article it is also found that users wants more orientation/ training programs for the optimum utilization of the available digital information resources and services. **Bhat<sup>2</sup> & Mudhol (2014)** in their paper they mainly focus on the application of ICT in the libraries for the development of e-resources in the medical libraries. In their paper they also give some suggestion regarding improve the internet connectivity, should have appointed qualified medical staff and organised some training programme to improve the efficiency of use of e-resources. **Kumar<sup>6</sup> (2016)** in his paper mentioned that e-resources are very informative for the medical student. It is observed that most of the users were aware of the e-resources from library notice/e-mail and colleagues, and use library to access the e-resources. In his study he mentioned that to develop a fully e-educational environment and reducing the problems of users it is important to develop a modern digital infrastructure. **Anasuya<sup>1</sup> (2017)** in her paper it is found that the professionals of medical, dental, and paramedical college/university libraries of Karnataka State are very much aware about the e-resources. From the study it also showed that majority of medical and dental professionals are dependent on e-resources to get relevant information followed by medical technology professionals. **Kishore<sup>5</sup> & Padmaja (2017)** in their paper it is clear that e- resources are very much helpful and importance for the medical professionals. So in their paper they give some suggestion to the library authorities or administration to take the initiatives to improve the searching aptitude among the medical library users in terms of using electronic resources and also take some necessary steps to improve their awareness and utilization of the available e-resources. **Vijayakumar<sup>9</sup> , Mahadeva & Saravanaraj (2017)** in their paper they mentioned that e-resources is very important in the present day environment. They also suggested that the digital resources are important tools for empowering medical faculty members of medical colleges of central Kerala. They also give suggestions to the library authority to access some relevant e-resources for the benefit of the medical faculty. **Vijayalakshmi<sup>10</sup> , Swaroop Rani & Ally Sornam (2017)** in their paper they indicate that electronic resources have become very important part of information source and being widely used by CMCH&RC students and faculty. It point out that most of the users are aware about electronics resources and they use this e-resource. So they give some suggestion to organised orientation programme, workshops, seminars etc among the CMCH&RC students and faculty to exploit the maximum benefit from the e-resources. **Shashikala<sup>7</sup> & Srinivasaragavan (2019)** in their paper they mentioned that e- resources is becoming a major source of health information for the users of Kempegowda Institute

of Medical Sciences Bangalore. They also give some suggestion regarding awareness of use of e-resources among the users and they mentioned that all e-libraries must have a computer expert as a staff.

## **OBJECTIVES OF THE STUDY**

The objectives of the study are:

- a. To find out the use of electronic resources by the Students and Faculty members.
- b. To find out the purpose of use of electronic resources by Students and Faculty members.
- c. To examine the most favourable places of access of electronic resources.
- d. To know the frequently used search engines by the respondents.
- e. To find out the obstacles and benefits by the usage of electronic resources

## **METHODOLOGY**

The scope of the study is limited to the users (Faculty and Students) of the Gauhati Medical College and Hospital, Guwahati. To full fill the objectives of the study, the survey method of research was used. A Structured questionnaire was prepared and visits the concerned library personally to collect the necessary data. A total number of 150 questionnaires were randomly distributed personally among the faculties and students of Gauhati Medical College and Hospital, Guwahati and received 115 numbers of duly filled up questionnaire from the respondents. The data has been analysed by using MS excel and presented in the table form.

## **ANALYSIS OF THE DATA**

Analysis of data has been done on the basis of received questionnaires from the students and faculty members of the GMCH. Collected data was analysed with simple percentage technique.

### **1. Category wise distribution of the respondent**

Category wise distribution of respondents is presented in the table 1. From the table it is found that out of the total 115 respondents, 58.26% of them are students and 41.73% of them are faculty members. It is concluded that majority of the respondents in the study are students.

**Table 1: Category wise distribution**

<b>Sl. No</b>	<b>Category</b>	<b>No. of respondent</b>	<b>Percentage</b>
1	Student	67	58.26%
2	Faculty Member	48	41.73%
	Total	115	76.66%

**N.B: Frequency count in percentage n=115**

### **2. Places of accessing e-resources by the users**

The respondents were asked to specify the place where from they access e-resources for their medical purpose.

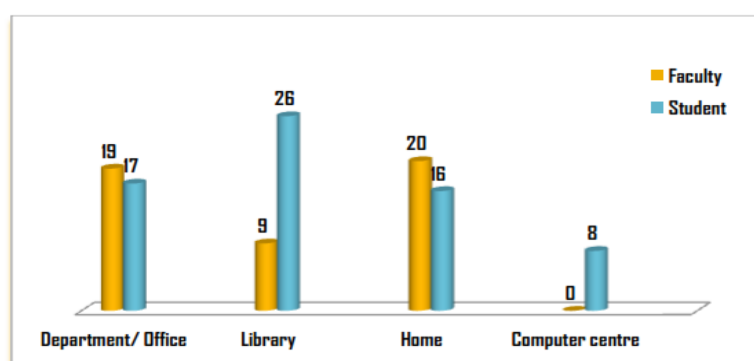
**Table: 2 : Places of accessing e-resources**

<b>Sl. No</b>	<b>Places of access</b>	<b>Faculty/%</b>	<b>Student/%</b>	<b>Total/%</b>
1	Department/ Office	19 (39.58%)	17 (25.37%)	36 (31.30%)

2	Library	09 (18.75%)	26 (38.80%)	35 (30.43%)
3	Home	20 (41.66%)	16 (23.88%)	36 (31.30)
4	Computer centre	--	08 (11.94%)	08 (6.95%)

**N.B: Frequency count in percentage n=115**

From the table it is clear that most of the students 26 (38.80%) access e-resources from the library followed by 17 (25.37%) from the department and 23.88% access the e-resources from home and 11.94% from computer centre. Similarly, the faculty members use e-resources 20(41.66%) at home, followed by 18(39.58%) in department/office and 9 (18.75%) access their e-resources at the library.



So, it is found that total highest percentage 36 (31.30%) choose library and departments as a place for accessing e-resources.

### 3. Frequency of using e-resources

The table number 3 shows frequency of using the e-resource.

**Table 3: Frequency of using e-resources**

**NB: Frequency count in percentage n=115**

Sl. No	Frequency of using	No. of respondent		Total/%
		Faculty/%	Student/%	
1	Daily	41 (85.41%)	62 (92.53%)	103 (89.56%)
2	Once in a week	07 (14.58%)	03 (4.47%)	10 (8.69%)
3	Monthly	--	02 (2.98%)	02 (1.73%)
4	As when required	--	--	

From the response of the respondents it is found that 62 (92.53%) number of students use e-resources daily followed by 03 (4.47%) numbers of use once in a week and 02 (2.98%) number user use e-resources monthly. In the same way most of the faculty members 41(85.41%) use it daily, followed by 07(14.58%) once in a week. So it can be concluded that highest number of students and faculties' 103 (89.56%) numbers are using e-resources daily.

#### 4. Favourable search engine for accessing e-resources

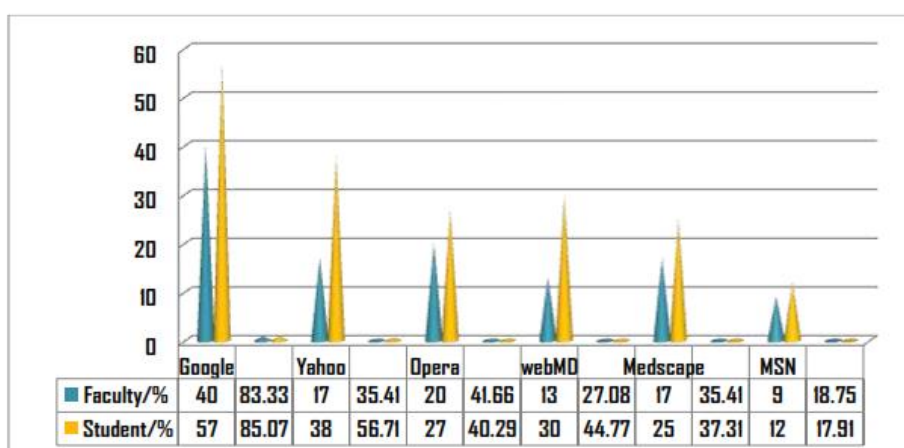
Respondents were asked to indicate the favourable search engine for accessing e-resources and it is depicted in the table 4.

**Table 4: Favourable search engine**

Sl. No	Search engine	No. of respondents		Total/%
		Faculty/%	Student/%	
1	Google	40 (83.33%)	57 (85.07%)	97 (84.34%)
2	Yahoo	17 (35.41%)	38 (56.71%)	55 (47.82%)
3	Opera	20 (41.66%)	27 (40.29%)	47 (40.86%)
4	webMD	13 (27.08%)	30 (44.77%)	43 (37.39%)
5	Medscape	17 (35.41%)	25 (37.31%)	42 (39.78%)
6	MSN	09 (18.75%)	12 (17.91%)	21 (18.26%)

(NB: Multiple choice option) & frequency count in percentage n=115

From the table is shown that 57 (85.07%) students prove that they prefer using search engine as Google, followed by 38 (56.71%) on Yahoo, followed by 30 (44.77%) on WebMD, followed by 27 (40.29%) on opera, followed by 25 (37.31%) on medscape and 12 (17.91%) on MSN.



**Fig2: Favourite Search engine**

In the same way 40(83.33%) faculty member preferred Google, followed by 20 (41.66%) on opera, 17 (35.41%) on Yahoo, followed by 17 (35.41%) on medscape and 09 (18.75%) on MSN. So it can be finished that the maximum numbers of students and faculties 97 (84.34%) use Google, followed by 38 (56.71%) use Yahoo as search engine for their work.

#### 5. Different types of medical databases used by the users

Table 5 Shows that 35 (52.23%) students consulted Medscape database, followed by 32 (47.76%) Pubmed, 29 (43.23%) consult proQuest, 21 (31.34%) consult Scopus, 13 (19.40%) consult Indmed database. Similarly 27 (56.26%) numbers of faculty member consult pumbed, followed by 23 (47.91%) consult ProQuest, 20 (41.66%) consult scopus, 15(31.25%) consulted Indmed and 11 (22.91%) consulted medscape.

**Table 5: Use of medical databases**

Sl. No	Medical Databases	No. of respondents		Total/%
		Faculty/%	Student/%	
1	Numbed	27 (56.26%)	32 (47.76%)	59 (51.30%)

2	Indmed	15 (31.25%)	13 (19.40%)	28 (24.34%)
3	Scopus	20 (41.66%)	21 (31.34%)	41(35.65%)
4	Medscape	11 (22.91%)	35 (52.23%)	46 (44.56%)
5	ProQuest	23 (47.91%)	29 (43.23%)	52 (45.21%)

(NB: Multiple choice option & frequency count in percentage n=115

So from the table it is clear that the higher percentage of students and faculties 59 (51.30%) use pubmed databases followed by 52 (45.21%) use ProQuest database.

## 6. Preferred file format while accessing e-resources

From the table it is shown that 46 (68.65%) numbers of students preferred .pdf as a file format, followed by 25 (37.31%) numbers preferred .doc format and 19 (28.35%) numbers of student preferred .html format.

**Table 6: Preferred file format**

Sl No	Preferred file format	No. of respondents		Total/%
		Faculty/%	Student/%	
1	.pdf	39 (81.25%)	46 (68.65%)	85 (73.91%)
2	.doc	12 (25.00%)	25 (37.31%)	37 (32.17%)
3	.html	08 (16.66%)	19 (28.35%)	27 (23.47%)

(NB: Multiple choice option & frequency count in percentage n=115

On the other hand 39 (81.25%) number of faculty members preferred .pdf format followed by 12(25%) numbers of faculty members preferred .doc format and 08 (16.66%) number of faculty members preferred .html format. So highest numbers of respondents 85(73.91%) preferred .pdf as a file format.

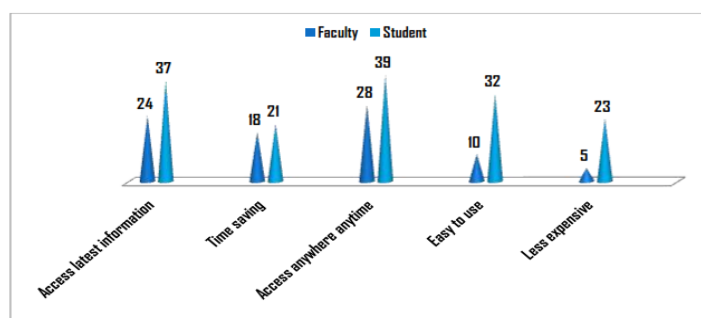
## 7. Benefits of using e-resources

Some benefits of the e-resources found from the views of the respondents are as shown in table 7.

**Table 7: Benefits of using e-resources**

Sl. No	Benefits of using e-resources	No. of respondents		Total/%
		Faculty/%	Student/%	
1	Access latest information	24 (50.00%)	37 (55.22%)	61 (57.86%)
2	Time saving	18 (37.50%)	21 (31.34%)	39 (36.65%)
3	Access anywhere anytime	28 (58.33%)	39 (58.20%)	67 (58.26%)
4	Easy to use	10 (20.83%)	32 (47.76%)	42(40.69%)
5	Less expensive	05 (10.41%)	23 (34.32%)	28 (27.34%)

(NB: Multiple choice option) & frequency count in percentage n=115



**Fig 3: Benefits of using e-resources**

From the table it is found that 39 (58.20%) numbers of the students said that e-resources can be access anywhere at any time, followed by 37(55.22%) numbers said they can access latest information, 32 (47.76%) numbers feels easy to use , 23 (34.32%) numbers of students feel e-resources are less expensive and 21 (31.34%) numbers of students feel that it is time saving. Similarly 28 (58.33%) numbers of faculty members said that e-resources can be access anywhere at any time followed by 24 (50.00%) numbers said they found latest information, 18(37.50%) numbers feels it is time saving, 10 (20.83%) said easy to use and 05(10.41%) numbers said that it is less expensive. So 67(58.26%) numbers of total respondents feel the benefits of e-resources is that it can access anywhere at any time.

### **8. Purpose of accessing e-resources by the respondent**

The purpose of using e-resources has been described in the table number 8. On the purposes of using e-resources a multiple choice question were asked to the respondents.

**Table 8: Purpose of accessing e-resources**

Sl. No	Purpose of accessing e-resources	No. of respondents		Total/%
		Faculty/%	Student/%	
1	Teaching/ study Purpose	25 (52.08%)	40 (59.70%)	65 (56.52%)
2	Preparing assignment/seminar paper/ article	18 (37.50%)	33 (49.25%)	51 (44.34%)
4	Up-to-date in the area of specialization	25 (52.08%)	38 (56.71%)	63 (59.73%)
5	For research purpose	19 (39.58%)	24(35.82%)	43 (40.52%)
6	To access Indian MEDLERS	20 (41.66%)	18 (26.86%)	38 (33.04%)
7	E-books	09 (18.75%)	23(34.32%)	32 (27.82%)
8	E-journals	15 (31.25%)	32 (47.76%)	47 (40.86%)
9	To find out the latest development in medical science	12 (25.00%)	20 (29.85%)	32 (30.43%)
10	To access the medical consortium	23 (47.91%)	42 (62.68%)	65 (56.52%)

**(NB: Multiple choice option) & frequency count in percentage n=115**

From the table it is observed that a total of 42(62.68%) number of students use of e- resources to access medical consortium, followed by 40 (59.70%) numbers of students access e-resources for teaching/ study purpose, 38 (56.71%) number of students use e-resources to update their area of specialization, 32(47.76%) numbers of student use e-resources for searching e-journals, 24 (35.82%) for research purpose, 20 (29.85%) to find out the latest development in medical science. Similarly 25(52.08%) faculty teaching/ study and development of area of specialisation, followed by 23 (47.91%) use e-resources to access medical consortium, 20 (41.66%) use e-resources to access MEDLERS databases. From the table it is found that the highest 65(56.52%) numbers of users uses e - resources for teaching/ study purpose.

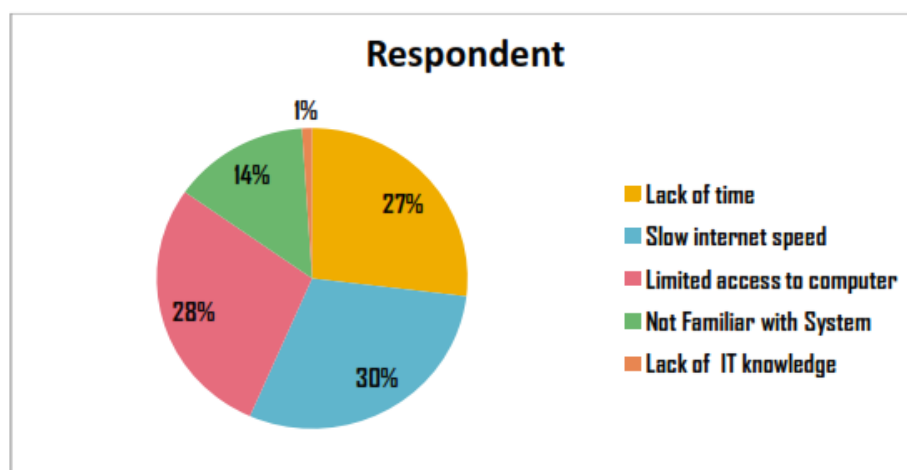
### **9. Types of problem faced while accessing e-resources**

From the Table 9 it is shown that 37 (55.22%) numbers of students face problem due to limited numbers of computers, 34 (50.74%) said lack of time, 29 (43.28%) face slow connectivity as major problem while accessing e resources. On the other hand, 23 (47.91%) numbers of faculty member face slow speed followed by 12 (25.00%) number said lack of time.

**Table 9: Problem faced while using e-resources**

Sl. No	Problem faced by respondents	No. of respondent		Total/%
		Faculty/%	Student/%	
1	Lack of time	12 (25.00%)	34 (50.74%)	46 (44.43%)
2	Slow internet speed	23 (47.91%)	29 (43.28%)	52 (49.00%)
3	Limited access to computer	11 (22.91%)	37 (55.22%)	48 (46.56%)
4	Not Familiar with System	09 (18.75%)	18 (26.86%)	27 (23.47%)
5	Lack of IT knowledge	02 (4.16%)	--	02 (1.73%)

(NB: Multiple choice option) & frequency count in percentage n=115

**Fig 4: Problem faced while using e-resources**

So it is found that the total highest percentage of students and faculties 52 (49.00%) numbers state that slow internet speed is the main problem during the time of using of e -resources.

## FINDINGS OF THE STUDY

- From the table it is found that the total highest percentage 65(56.52%) numbers of users uses e -resources for teaching/ study purpose.
- It is found that 67(58.26%) numbers of total respondents feel e-resources can be access anywhere at any time.
- Highest percentage (51.30%) of users use pubmed databases followed by (45.21%) use ProQuest database for their study.
- From the study it is concluded that highest percentage of students and faculties (89.56%) are using e-resources daily.
- Highest numbers of respondents (73.91%) preferred .pdf file format.
- Total 97 (84.34%) numbers of users use Google, followed by 38 (56.71%) numbers choose Yahoo as search engine for their work.



- As a place of accessing e-resources, total 36 (31.30%) numbers of users choose library as well as departments as a place of accessing.
- 52 (49.00%) numbers of students & faculty members find slow internet speed is the major problem while accessing of e- resources.

## **CONCLUSION**

Now a day's e-resources are considered as one of the very important part of any academic institutions and their users. E-resources have a great impact on the academic performance of the any academic community and at the same time it is time consuming, access can e possible at anytime anywhere. Due to the rapid growth of ICT and development of e-resources in various formats, an academic organisation should have to apply ICT technology for the better performance of the community it serves. Medical science is one of the very fast growing fields in this present era. Latest medical technology is developed day by day for the better patient care. So Library professional have a better role in this present ICT age. The present study was carried out on the use of e-resources by the users of Gauhati Medical College and Hospital, Guwahati. It shows that e-resources have played a major role in information seeking process. From the study it is found that e-resources play a major role among the students and faculty members of the Gauhati Medical College and Hospitals.

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