Awareness and Use of E-Resources by MBBS Students in Government Medical College, Jammu

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ABSTRACT

This study is an attempt to determine and find the present status of awareness, accessibility, and use of e-resources by the MBBS students in Government Medical College (GMC) Library, Jammu. A survey method was used to collect the data and a structured 250 questionnaires were randomly distributed among MBBS students, out of a total, 220 filled questionnaires were received back with giving an overall response rate of 88% which were later studied and analyzed each questionnaire to fulfil the objectives. The paper analyzed various use of e-resources among the students such as types, benefits, frequency, purpose, format which the medical students prefer while using the online resources to fulfill their desired information. After analysis, it has been found that most of the students are aware of open access resources.

Key Words : E-resources, Digital resources, Medical College libraries, GMC- Jammu

INTRODUCTION

Electronic resources were first introduced into libraries in the mid-60s. Hence, the libraries have to transfer from its conventional approach of acquisition to modern approaches. Many libraries have transferred to digital and virtual libraries, where books, journals, and magazines have changed into e-books, e-journals, and e-magazines. Digital resources have become a very important aid in the field of research and education. It has created a great revolution in every field. The concept of e-resources has been used interchangeably synonymous with digital resources, online resources, and web resources. But in simple, online resources are the resources available on the internet.

The term 'Information Technology' in English means 'Informatique'. The word Information Technology consists of two words, one is information and the other is technology. Information means knowledge, it can be bit, or a paragraph and technology mean the branch of knowledge dealing with applied science. Also, the dictionary definition of technology is the "Systematic application of scientific and other organized knowledge,

skills to practical tasks by the use of computer and communication". Computer and various other forms of automation including micrography and reprography are known as modern 'Information Technology'. They have been already introduced in the library operations and services such as circulation control, book ordering, abstracting and indexing services, SDI (Selected Dissemination of Information), and CAS (Current Awareness Services). The computer and online terminal facilitate operations like centralized cataloguing, network planning, resource sharing, etc. at considerably low costs.

Electronic resources are originated from the concept of e-publishing since 1985 many changes have taken place on online or electronic publishing. The concept of "printed document" is being changed to "electronic document" or "electronic resources". Therefore, electronic resources can be defined as the resources existed in an electronic form that is accessed by the users by computer. Electronic Resources is a very broad term that includes a variety of different publishing models such as OPAC, CD-ROMs. E-resources also include online databases, e-journals, e-books, e-thesis, internet resources, e-mail publishing, wireless publishing,

electronic link, and web publishing, etc. Digital resource is a very broad term which means any electronic product that delivers a collection of data be it in text, numerical, graphical, or time based, as a commercially available resource and a kind of documents in digital formats which are made available to library users through a computer-based information retrieval system. The different search engines used to retrieve the information are Google, Yahoo, Alta Vista, etc.

Need of E-resources:

E-resources help the librarian to provide better service to the user community. The need for digital resources is mentioned below:

– E-resources can be searched quickly.

– E-resources can be found easily by the user.

– These resources can be stored in a large amount.

– To get access to an information source by more than one user.

– To collect, store, and organize the information in digital form.

– To promote efficient delivery of information economically to the users.

Advantages of E-resources:

– The speed of publication of each issue of electronic resources is much faster than the print. This means that information is much more up to date than can be achieved with paper.

– The main advantages of electronic resources are their global distribution, their hyper-tech link, the ability to access different sites, and the ability to search.

– There are several search engines available to access and to retrieve appropriate e-resources from the web. It also provides the facility for keyword search, author search, subject search, etc.

– A major advantage of e-resources is that users can gain access to the information at any time day and night.

– It can provide the journal whose issues are missing.

Disadvantages of E-resources:

– The major disadvantage of e-resources is difficult to read on the desktop.

– E-resources needs a high installation cost.

– It requires hardware and software.

– It requires skill and training to use.

– The content is in many cases self-generated content only.

Scope and coverage:

Government Medical College Jammu which is abbreviated as GMC is a premier institute of Jammu and Kashmir (Union territory). It was established in the year 1973 in a temporary building with the object to provide quality education to the students and deliver the health care service to the people of this region. This institute is located in the heart of temple city Jammu. Government Medical College is headed by the Principal and Dean. The principal of GMC is Chairman of the College council. Central Library of GMC, Jammu has four Under-graduates and two Post-graduate and one staff common reading. The library consists of one journal section, one reference section, one teacher's section and a reading hall with a seating capacity of one hundred is available in the library. Both Indian and Foreign Journals are subscribed annually for the research work.

Literature review:

Santhanalakshmi and Veerachamy (2019) carried out a study on the usage of e-resources by the two colleges of Chennai namely SRM Medical College (founded in 2005) and Stanley Medical College and found that the Medical Students use digital resources to search the subject related activities. Online resources are fee-based and most of the medical professionals using online resources such as Pub Med, BMC, etc. It is also found that medical professionals access digital resources to get updated their field and use electronic resources from anywhere which helps to save their time.

Vijayalakshmi (2017) conducted a study on the usage of Electronic information resources among students and faculty at Chennai Medical College at Trichy. This study aims to know about the use of various types of e-resources by the students and faculty members and the electronic database subscribed by the library. This study shows that digital resources have become an important part of the information and are used by CMCH and RC students and faculty members. It is also found that medical students use digital resources to keep them up to date in their field.

Gaikwad (2017) conducted a study on the Awareness and use of electronic information resources at Arts and Commerce College, Madha: A study. E-resources have becoming bubbling boon for library

professionals as well as library users in this Google era. E-resources are available in multi-variety forms. Information is generated from every corner of the world and its explosion rate is very high and ever-growing. The main purpose for which students use e-resources is for study. Faculty members are highly satisfied with the e-resources facility. It is found that all Ph.D. scholars are aware and using UGC INFLIBNET -N-LIST consortia. Most of the scholars were using e-resources for research and teaching respectively. Faculty members use e-resources to update knowledge and teaching. UG students use e-resources for study and to update their knowledge.

Bansal (2015) conducted a study on the usage of e-resources among agricultural scientists of the Himalayan region in India and found that electronic information has transferred the way of accessing the information for scientists and research scholars. The impact of electronic information resources on the scientist is such that they spend much more time in e-resources for various information activities than printed sources. The study also found that scientists prefer e-format but at the same time they keep the print format alive. The most preferred databases used by scientists are CAB Abstracts and AGRIS. It is also found that ICAR (Indian Council of Agricultural Research) should build a new collection of e-resources at the central level.

Priyadharshini *et al.* (2015) carried out a study on the usage of e-resources by the users of agricultural college and research institute at Madurai and found that the usage of electronic journals and e-books have been increased quickly. It is found that digital resources are accessed through search engines like Yahoo, Google, AltaVista, etc. It is also found that digital resources play an important role in the library to fulfill the information need of the users. Electronic resources sources such as e-books, e-journals, thesis, etc. are like to be alternative to print media. All the information is retrieved through an online database such as Scopus and Emerald. The library needs to subscribe to the electronic resources in the library which meet the information need of the users.

Chakraborty (2014) carried out a study on the use of online resources for medical science information in Bangladesh and found that all the students using online resources in the medical college. The library of the medical college provides access to various databases and online journals to the users. About 88% of the respondents use online resources to search for health science information. The study also found that about 72.2% of

respondents find useful information on the internet and most of the respondents (65.3%) use the digital resources from college while (19.64%) of the respondents access the electronic resources from home. The study also reveals that about 80.02% of the respondents feel that digital resources cannot replace print resources. The most popular internet service used by medical students is E-mail service libraries.

Thanuskodi (2012) carried out a study on the use of e-resources by the students and researchers of the faculty of Arts in the Annamalai University. This study found that about 47.78% of the respondents want to access the digital version, whereas only 32.78% of the respondents want to study printed journals, but 19.44% of the users want to access both print and electronic versions. About 76.66% of respondents use electronic resources for writing research papers. It is also found that the fastest growth in the information communication technology brought many changes in the traditional method of retrieval and storage of information. Many of the users are unaware of the use of digital resources and some of them did not know how to use electronic resources, so the librarian needs to conduct awareness programs for the users. OPAC and online databases are important for their study and research.

Objectives:

The main objective of the study is to evaluate the use of e-resources by the users of medical colleges. The specific objectives of the study areas:

– To find out the frequency and average time spend by the users.

– To identify the purpose of the use of e-resources.

– To determine the satisfaction level among the user about e-resources.

– To determine the type of e-resources mostly used by the users.

METHODOLOGY

The methodology has its importance in the scientific investigation because objectivity in any research investigation cannot be obtained unless it is carried out in a very systematic and planned manner. The scientific investigation involves careful and proper adoption of research design, the use of standardized tools, and test techniques, sound procedures for collecting data and thereafter-careful tabulation of the data, and the use of

appropriate statistical techniques for analyzing the data. There are several search techniques available for user studies such as questionnaires, observation, interviews, and documentary techniques. To get a meaningful conclusion the variable analyzed are the U.G students of Government Medical College, Jammu.

Tools and technique administered:

To conduct a qualitative and quantitative analysis, the questionnaire method is used for collecting the necessary data. A self-administered questionnaire was designed to collect the data on the awareness of e-resources, type of e-resources/ online resources used, and the barriers to using electronic resources.

Sample population:

The collection of data from the UG students of Medical College was enough to cover in a single study. The total numbers of 250 questionnaires were distributed randomly to the students of Medical College, Jammu. A total number of 220 filled questionnaires were returned. The collected data was scrutinized, tabulated, and analyzed for better understanding with the help of MS Excel and using some statistical methods.

Scope and liminations:

The scope of the study is to investigate and identify the awareness and use of electronic resources by the students of Government Medical College, Jammu. The study is confined to U.G. students only.

RESULTS AND DISCUSSION

Gender wise classification of respondents:

Table 1 depicts the Gender-wise classification of respondents. Out of a total of 220 respondents, the maximum number 126(57.27%) are female while the rest 94 (42.72%) are male.

Table 1 : Gender wise classification of respondents

Sr. No.	Gender	Frequency	Percentage
1.	Male	94	42.73%
2.	Female	126	57.27%
	Total	220	100.00%

Awareness of open access E-resources:

Table 2 indicates that out of total respondents (220), the maximum number of the respondents i.e. 204 (92.72%) are aware of open access e-resources and the

least number of respondents i.e. 16 (7.27%) are not aware of open access e-resources.

Table 2 : Awareness of open access E-resources

Sr. No.	Response	Frequency	Percentage
1.	Yes	204	92.73%
2.	No	16	7.27%
	Total	220	100.00%

Preference for open access E-resources:

Table 3 shows the preferred open access e-resources used by the respondents. Out of the total, 220 respondents' maximum number of the respondents i.e. 98(44.54%) preferred DOAJ, followed by Bentham Open and Pub Med, both are used by the 42(19.09%) of the respondents and the least of a number of the respondents i.e. 20 (9.09) prefer Med-know publication.

Table 3 : Preference for Open Access E-resources

Sr. No.	E-resources	Frequency	Percentage
1.	DOAJ	98	44.54%
2.	Bentham Open	42	19.09%
3.	Med-know publication	20	9.09%
4.	Pub Med	42	19.09%
5.	Any Other	18	8.19%
	Total	220	100.00%

Availability of E-resources:

Table 4 indicates that out of 220 respondents, the maximum of the respondents uses Access Medicine i.e. 125 (56.81%) followed by Med One Neurosurgery i.e. 85 (38.63%) and least number of respondents use JAMA evidence i.e. 04 (1.81%).

Table 4 : Availability of e-resources

Sr. No.	E-resources	Frequency	Percentage
1.	Access Medicine	125	56.84%
2.	Muscle and Nerve	06	2.72%
3.	JAMA evidence	04	1.81%
4.	Med One Neurosurgery	85	38.63%
	Total	220	100.00%

Frequency of using the E-resources:

Table 5 shows the frequency of the use of e-resources by the respondents. It was found that out of total 220 users; the maximum number of the respondents i.e. 75 (34.09%) use e-resources daily, followed by 60(27.27%) of the respondents use e-resources

occasionally and the least number of the respondents *i.e.* 35(15.90%) use e-resources monthly.

Table5: Frequency of using the E-resources

Sr. No.	Frequency	Total	Percentage
1.	Daily	75	34.09%
2.	Weekly	50	22.72%
3.	Monthly	35	15.92%
4.	Occasionally	60	27.27%
	Total	220	100.00%

Time spent to use E-resources:

Table 6 shows the time spent by the users to use the e-resources. It was found that out of total 220 respondents, maximum 114 (51.81%) of the respondents spent 2-3 hours a week to use e-resources, 46 (20.90%) of the respondents use e-resources 4-6 hours a week and the least number of the respondents 24(10.90%) use e-resources 7-10 hours a week.

Table 6: Time spent to use the E-resources

Sr. No.	Time	Total	Percentage
1.	Less than one hour	36	16.36%
2.	2-3 hours a week	114	51.81%
3.	4-6 hours a week	46	20.90%
4.	7-10 hours a week	24	10.93%
	Total	220	100.00%

Purpose of using the E-resources:

Table 7 shows the purpose of using e-resources. The students of GMC use e-resources for many different purposes. Out of a total of 220 respondents about 118(53.63%) of the respondents use e-resources for education, followed by 76(34.54%) use e-resources to update themselves and the least number of the respondents *i.e.* 04(1.81%) use e-resources for teaching.

Table 7: Purpose of using the e-resources

Sr. No.	Purpose	Frequency	Percentage
1.	Research	22	10%
2.	Education	118	53.63%
3.	To update yourself	76	34.55%
4.	Teaching	04	1.82%
	Total	220	100.00%

Satisfaction Level of accessing the E-resources :

Table 8 indicates the satisfaction level of the users with the e-resources. It was found that out of total 220 respondents, maximum 96(43.63%) of the respondents

are least satisfied with the e-resources, followed by 88(40%) of the respondents are partially satisfied with the e-resources and least number of respondents *i.e.* 36(16.36%) are fully satisfied with the e-resources

Table 8: Satisfaction level of accessing the E-resources

Sr. No.	Level	Number	Percentage
1.	Fully	36	16.36%
2.	Partially	88	40%
3.	Least Satisfied	96	43.64%
4.	No comments	0	0%
	Total	220	100.00%

Types of E-resources used:

Table 9 shows the types of e-resources used by the users of the GMC, Jammu. It is found that the maximum number of the respondents *i.e.* 77(35%) use Library Catalogue, followed by 61(27.72%) use Electronic Journals and the least number of the respondents use Bibliographic Databases.

Table 9: Types of E-resources used

Sr. No.	Types	Total	Percentage
1.	Library Catalogue	77	35%
2.	Bibliographic databases	37	16.82%
3.	Electronic Books	45	20.45%
4.	Electronic Journals	61	27.73%
	Total	220	100.00%

Advantages of accessing the E-resources:

Table 10 shows the advantage for which the respondents of the GMC, Jammu use e-resources. It is found that out of total 220 respondents, the maximum number of the respondents *i.e.* 115(52.27%) have the advantage of easy to use, followed by 50(22.72%) use for the motive of core journals and the least number of the respondents *i.e.* 10(4.54%) use for the motive of expert assistance from the library staff.

Table 10: Advantages of accessing the E-resources

Sr. No.	Advantages	No. of response	Percentage
1.	Core journals	50	22.72%
2.	Wide range of online journals	45	20.45%
3.	Expert assistance from library staff	10	4.54%
4.	Easy to use	115	52.27%
	Total	220	100.00%

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Location for accessing the E-resources:

Table 11 indicates the location from where the respondents access the e-resources. Out of a total of 220 respondents about 124 (56.36%) of the respondents use e-resources from home, followed by 50(22.72%) of the respondent's access e-resources from the college library and the least number of the respondents *i.e.* 46(20.90%) access e-resources from the internet cafe.

Table 10: Advantages of accessing the E-resources			
Sr. No.	Advantages	No. of response	Percentage
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2.	Wide range of online journals	45	20.45%
3.	Expert assistance from library staff	10	4.54%
4.	Easy to use	115	52.27%
	Total	220	100.00%

The format used for accessing the E-resources:

Table 12 shows the format used by the respondents for using the e-resources. It was found that out of a total of 220 respondents, 142(64.54%) of the respondents use PDF format, followed by 62(28.18%) of the respondents use HTML format and least number of the respondents *i.e.* 16(7.27%) use Word format for accessing the e-resources.

Table 11: Location for accessing the e-resources			
Sr. No.	Location	Total	Percentage
1.	College library	50	22.72%
2.	Home	124	56.37%
3.	Internet Cafe	46	20.91%
	Total	220	100.00%

Problems in using the E-resources:

Table 13 indicates the problems faced by the respondents while using e-resources. It is found that out of total 220 respondents, maximum 107(48.63%) of the respondents face the problem of slow internet, followed by 88(40%) of the respondents face the problem of

Table12: Format used for accessing the E-resources			
Sr. No.	Format	Total	Percentage
1.	PDF Format	142	64.54%
2.	HTML Format	62	28.18%
3.	Word Format	16	7.28%
	Total	220	100.00%

downloading the pages and the least number of the respondents *i.e.* 06 (2.72%) face the problem of overload of information on the internet.

Major Findings:

− Most of the students are aware of Open Access e-resources and a maximum of the students prefer DOAJ for finding their information.

− A large number of the students (34.09%) of the MBBS use e-resources daily.

− Most of the medical students (56.36%) use the e-resources through the home.

− A maximum of medical students (53.63%) use e-resources for education.

− The medical students generally took assistance from friends for using e-resources.

− Slow internet is the major hurdle while using the e-resources by the medical students.

− The majority of the medical students (43.63%) are least satisfied regarding the accuracy of information retrieved and very few are fully satisfied.

− Most of the students (43.63%) get the benefit of easily find the information through online/electronic resources and (25%) get the benefit of saving time.

− The majority of the students (64.54%) of MBBS prefer PDF format to read the information they retrieved through e-resources.

− Most of the medical students (35%) use the library catalogue and few use electronic journals.

− Most of the medical students (38.63%) use simple search techniques for finding their information.

− Most of the students (56.81%) use Access Medicine as an online database for their education purpose.

Suggestions:

Some of the suggestions based on the findings are as follows:

− The library should improve its collection to meet the users' needs.

− The library should organize some programs from time to time so that the user may be aware of library resources as well as e-resources.

− The library should provide internet facilities for students.

− The library should subscribe to the e-resources from time to time.

− Infrastructure facilities should be provided for

accessing the electronic resources by the students, the library should subscribe to more e-journals.

Conclusion:

The use of electronic resources by the Medical College Students, Jammu shows that 100% of the students are aware of an electronic resource and mostly make use of them. The uses of e-resources have created a great impact on the users of the Government Medical College, Jammu. Most of the students are not satisfied with the e-resources available to them. They use a new means of technology for retrieving quick information. The e-resources available on the internet are used by the students generally at home. For searching the e-resources generally link through the search engines is preferred over others. Electronic resources have become an important part of human life in the 21st century for their study and knowledge. Access Medicine is the subscribed e-resource followed by Med One Neurosurgery used by most of the students of Medical College and DOAJ is the Open Access e-resource which is used by most of the students. It is clear from the study that the younger generation has accepted electronic resources. They are spending more time on e-resources than on printed sources for various information activities. The electronic format is their preferred medium for various kinds of information, but at the same time, they want to keep print medium.

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