



## VIEWPOINT AND USAGE OF E- RESOURCES AND INTERNET BY FIRST MBBS STUDENTS

### KEYWORDS

E-resources, first MBBS students, learning process, Internet.

#### Dr Kumud N Harley

ASSOCIATE PROFESSOR, DEPARTMENT OF BIOCHEMISTRY. GMC AKOLA, MAHARASHTRA. INDIA.

#### Dr Gajanan G Atram

PROFESSOR & HEAD, DEPARTMENT OF PHYSIOLOGY, GMC AKOLA. MAHARASHTRA. INDIA.

#### Dr Jayshri S Jankar

TUTOR (MD BIOCHEMISTRY), SVNGMC, YAVATMAL. MAHARASHTRA. INDIA.

#### Dr Pradnya G Atram

ASSOCIATE PROFESSOR, DEPARTMENT OF PHYSIOLOGY, GMC, AKOLA. MAHARASHTRA. INDIA

### ABSTRACT

**Background:** Internet and E-resources are a very broad term that includes a variety of different file formats. Instant access is quite possible with e-resources within a fraction of second. Acquiring knowledge from E-Books, E-Journals, Online resources, Internet with related databases are the impact of e-resources. Internet and e-resources had a great impact in learning subjects included in first year curriculum and are more popular among medical students now a days to facilitate self-directed learning.

**Objective:** The main objective of this study was to investigate the impact of e-resources on first MBBS medical students in terms of gateway access, purpose, extent of accessing internet, awareness and problems faced.

**Study Method:** Questionnaire based survey was conducted on 65 first M.B.B.S students of tertiary care Hospital and Medical Institute in Vidharbha region and students were administered with a questionnaire at the end of academic year to assess the impact of the e-resources on various aspects.

**Results:** Total 83% students felt that e-resources are significantly useful and acquire a high quality of knowledge. 89% students accessed e-resources mostly for studying & updating subjects knowledge. 83% students liked to access internet and e-resources for seminars and assignments completion. 72% students preferred laptops, computers and mobiles etc as a Gateway for accessing e-resources. The frequency of accessing e-sources was increased steadily as the year progressed. About 54% students felt that e-sources are more informative & 46% students stated that e-resources increased interest constantly in studying first MBBS subjects and ability to answer questions in assessments had improved.

**Conclusion:** First-year medical students widely accessed internet and e-resources and have a significant positive impact on various aspects of their learning process. E-resources not only assist in learning first MBBS subjects but also enhance their interest to understand subject more easily.

### INTRODUCTION

Now a days Internet and E-resources has emerged as a powerful educational tools which has contributed for technological literacy and allowed people all over the world fast access to vast resources.<sup>[1]</sup> The internet has become an essential part of day to day life and exerts direct impact on people's idea and behavior. It is very important and useful source for fulfilling the academic demands of the students.<sup>[2]</sup>

The advent of information technology has resulted in reducing the size of libraries. It is possible due to the digitisation of information, which has gradually replaced paper-based records. As the visual information system in comparison to text-based information system is getting more popular these days, the traditional libraries are moving towards digital libraries.<sup>[3]</sup> Thus the present Scenario demands unavoidable shift from print paper to paperless culture of digital technology which affects teaching learning process in higher education positively.<sup>[4,5]</sup>

The medical and technical education is important for the development of any country and as Internet is an unavoidable requirement for every institution of higher learning, use of the internet has become a part of university students daily routine. It is integrated into their daily communication habits and has become a technology as ordinary as the telephone or television. Medical college students use the internet nearly as much for social communication as they do for their education.<sup>[3]</sup>

Electronic resources are easily accessible in remote areas. Electronic resources solve storage problems and control the flood of information. Electronic information sources are becoming more important for the academic community. The prominent among them is the e-resources.<sup>[6]</sup> Acquiring knowledge from E-Books, E-Journals, Online resources, Internet with related databases are the impact of e-

resources.<sup>[7]</sup>

Internet and e-resources had a great impact in learning subjects included in first year curriculum and are more popular among medical students now a days to facilitate self-directed learning. India has made available e-resources to first-year medical students to supplement conventional lecture based teaching in the subject.<sup>[8]</sup> Present study was therefore conducted with an aim to investigate the viewpoint and impact of usage of e- resources and internet on first MBBS students in terms of gateway, access, purpose, extent of accessing internet, awareness and problems faced.

### OBJECTIVES

Following are the important objectives of the study:

1. To analyze students Necessity behind the usage of e-sources.
2. To identify students views regarding training required while using of e-sources.
3. To assess the extent ,frequency of access ,gateway of access of internet preferred by students.
4. To study the purpose of access and file format preferred while accessing the e-sources.

### METHODOLOGY

A structured questionnaire was distributed among 65 first MBBS medical students (Male= 31 & Female = 34) from Tertiary Care Hospital and Medical Institute in Vidharbha region, Maharashtra willing to become the part of this educational project. All the valued responses were tabulated, analyzed and interpreted in Percentages.

### RESULTS & DATA ANALYSIS

**Table 1; Opinion of students regarding Role, Training & Purpose of e-resources**

Opinion	Sex	Yes	No
Do u feel E-resources play important role in teaching learning process ?	Male n=31	22(71%)	9(29%)
	Female n=34	32(94%)	2(6%)
	Total n=65	54(83%)	11(17%)
Do u feel training should be made available regarding the use of e-sources ?	Male n=31	21(68%)	10(32%)
	Female n=34	25(74%)	09(26%)
	Total n=65	46 (71%)	19(29%)
Purpose; For studying & updating subjects knowledge	Male n=31	27(87%)	4(13%)
	Female n=34	31(91%)	3(8%)
	Total n=65	58(89%)	7(10%)
Purpose; For Seminars Assignments etc	Male n=31	26 (84%)	5(16%)
	Female n=34	28 (82%)	6(24%)
	Total n=65	54 (83%)	11(9%)

**Table1**, reveals importance of e-resources and internet among students, total 83% (M=71% & F=94% ) felt that internet play important role & e-resources are significantly useful in acquiring a high quality of knowledge. Only 17% (M= 29%, F=6%) thought its least important in teaching-learning first MBBS subjects. Total 71% (M=68% & F=74%) students felt that training should be provided at the entry level by trained professional at medical colleges so that accessing internet would be easier for them in future. Total 89% students (M=87%; F= 91%) accessed e-resources mostly for studying & keeping subjects knowledge updated. And 83% (M=84% & F=82%) also liked to access internet and e-resources for seminars and assignments completion given by teachers during first MBBS curriculum.

**Table-2: Gateway Used For accessing e-resources & File Format Preferred**

Gateway Used For accessing e-sources			File Format Preferred Most to download			
Sex	Central Library	Personal Computer / Laptop / Mobiles	PDF	HTML	Power Point Presentation	
Male n=31	3(10%)	28(90%)	23(74%)	6(19%)	2(7%)	
Female n=34	15(44%)	19(56%)	21(62%)	0(0%)	13(38%)	
Total n=65	18(28%)	47(72%)	44(68%)	6(9%)	15(23%)	

**Table 2** reveals, 28% students (m=10%; F=44%) visiting library as a gateway to use e-resources. However, personal means like Laptop, Computers & Mobiles etc preferred by 72% students (M=90%; F=56%) . 68% students preferred PDF format most followed by Power Point and HTML to be downloaded with total 23% & 9% respectively.

**Table 3: Advantages of E-sources & Disadvantages of accessing E-sources in terms of Distractions / Engage in activities other than study like chatting, e-mailing etc.**

Sex	Advantages		Disadvantages			
	More informative/Instant Information provider	Increases Interest in the subject/ Interpret easily	Time consuming/ too much unnecessary information		Distracted in other activities like chatting etc.	
			No	Yes	No	Yes
Male n=31	21(68%)	10(32%)	20(65%)	11(35%)	17(55%)	14(45%)
Female n=34	14(41%)	20(59%)	24(70%)	10(30%)	21(62%)	13(38.%)
Total n=65	35(54%)	30(46.%)	44(68%)	21(32%)	38(58%)	27(42%)

Survey also attempted to know the applications of internet use, **Table 3** shows, total 46% students (F=59%, M=32%) felt that use of e-resources increased and developed more interest in studying first year subjects. In response to questionnaire regarding information provider, total 54% students (M= 68%, F=41%) thought that it is more informative and provides instant information within short time . Students were asked about the demerits while accessing internet and

e-resources. (Table3) depicts that 68% students (M=65%; F= 70%) felt that it is not time consuming whereas 32% students (M=35%; F=30%) were of contrast views. Also 58% students (F=62%, M=55%) felt it is not distracting but 42% students (M=45%,F=38.23%) faced problem of getting distracted in other activities like chatting and e-mailing. And given opinion that many times too much unnecessary information is available which is cumbersome to sort out.

**Table-4: Frequency& Extent of using internet / e-resources in a Week & Daily**

Sex	Frequency of using internet in a Week			Extent of using internet /e-resources by students				
	Daily	Twice a week	Thrice a Week	1 hour	2hour	3hour	4hour	5hour
Male n=31	22(71% )	08(26% )	01(3%)	08 (26%)	13 (42%)	08 (26%)	02 (6%)	0 0
Female n=34	18(53% )	13(38% )	03(9%)	14 (41%)	12 (35%)	06 (18%)	02 (6%)	0 0
<b>Total n=65</b>	<b>40(62% )</b>	<b>21(32% )</b>	<b>04(6%)</b>	<b>22 (34%)</b>	<b>25 (38%)</b>	<b>14 (22%)</b>	<b>04 (6%)</b>	<b>0 0</b>

To assess the rate or frequency of using internet and e-resources in a week ,it was observed that (**Table 4**) total 62% students (M=71% ; F=53% ) liked to assess internet daily followed by 32% (M=26%; F=38%) with twice a week, and 6% students used internet thrice in a week. Table 4 denotes that, 34% students use internet for at least 1 hour, where as 38%, 22% ,& 6% use internet for 2, 3 and 4 hours daily respectively. Total 86% students agreed that the frequency of using internet and e-resources has also increased gradually as the year progressed

**DISCUSSION**

Number of studies have been conducted on the students and faculties regarding use of internet and satisfaction with e-resources available in the universities worldwide.<sup>[1]</sup>The present study examined the viewpoint and usage of e- resources and internet by first MBBS students. It was observed that total 83% students felt that Internet and use of e resources assisted them and played a very important role in teaching learning process. Similar result observed by Md. Maidul Islam, Umme Habiba<sup>[1]</sup> where respondents main purpose of searching e-resources was for learning. Habiba and Chowdhury<sup>[9]</sup> discovered that most of the users(54%) accessed e-resources every day for learning. Bhat MI<sup>[10]</sup> found 71.25 % B-Ed students used the digital resources to collect subject information, 50.62% to upgrade general knowledge and 39.37% for career development. In present study, total 71% students felt that training should be provided at the entry level by trained professional at medical colleges so that accessing internet would be easier for them in future. Mohd Iqbal Bhat<sup>[3]</sup> also stated that majority (50.62%) of medical students have expressed 'lack of training' is the main impediment to use digital resources. Achonna<sup>[11]</sup> reported the need for the training skills, to popularize the information technology and its usage and to motivate the students to use e-journal resources. In Present study, total 89% students used internet and e-resources mostly for studying & keeping subjects knowledge updated & 83% students liked it for seminars and assignments completion given by teachers during first MBBS curriculum. Similar study conducted by Mulla<sup>[12]</sup> where majority of the students (51.02%) used internet to prepare assignments/ seminars. Mishra, Yadav and Bisht<sup>[13]</sup> showed 61.5% males and 51.6% females used Internet for preparing assignments. Biradar and others<sup>[14]</sup> found that most of students used internet for study/ teaching purpose. Arthurand Braf<sup>[15]</sup> showed that more students used the internet technology to look for information for assignments. Bin Ghouth<sup>[16]</sup> observed that 80% of the students used computers for academic activities, for thesis or research work. In our study, 28% students visited library as a gateway to use e-resources and total 72% students preferred personal means like laptop, computers and mobiles. Several earlier studies found similar results; Md. Maidul Islam, Umme Habiba<sup>[1]</sup> found that, a significant

proportion of users accessed internet from library. Biradar and others<sup>[14]</sup> indicated library as a favourite place for using internet by the Student and faculties. Agrawal Sumit S and et al.<sup>[17]</sup> stated 94.2% students accessed internet from mobile, 32.2% from computer/laptop. In our study 68% students preferred PDF format most followed by Power Point and HTML. Jamali, Nicholas, and Huntington<sup>[18]</sup> made conclusions of several studies that the users preferred PDF rather than HTML format. In the present study, total 62% students liked to assess internet daily followed by 32% twice & 6% thrice a week. We found that 34 to 38% students use internet for at least 1-2 hour, and 22% and 6% for 3 & 4 hours daily respectively. Total 86% students agreed that the frequency of using internet and e-resources has also increased gradually as the year progressed. Md. Maidul Islam, Umme Habiba<sup>[1]</sup> in their study observed a majority of the respondents used library daily and other significant proportion of users used library on two or three times a week. Agrawal Sumit S et al.<sup>[17]</sup> and Singh B, Gupta R<sup>[19]</sup> observed that 78% study subjects and 51.20% students used internet daily respectively. Study carried out by Kisham Sangeeta, Tongbram Shushilkanta Singh<sup>[2]</sup> revealed that majority of the students (46.7%) used Internet daily, 22.84% more than once a week, 16.24% once in a week. They also found that 47.71% students used the internet for 1-3 hours, 18.27% for 3-5 hours, 14.21% for more than 5 hours. It was observed that the students using the internet almost all the time and they were expected to be proficient, comfortable and experience users of the system.

## SUGGESTIONS

1. Access point should be increased by increasing band with fast access.
2. Lack of power supply most of the time makes access difficult, hence Backup system should be provided at institutional library to save data.
3. After joining first MBBS, training /awareness lecture regarding use of internet should be introduced specially for those who came from rural background.

## CONCLUSION

In recent era of technology, Internet and E-resources have become the inevitable requirement of institutions to rely on. To explore recent innovative information in fraction of minutes makes it more popular system in students and faculty as well. Present survey clearly point out the positive opinion of students in terms of its use, knowledge, updation, necessity and access of location preferred. The advances in information technology enable and assist institutions across the globe to create learning atmosphere. It helps students in self directed learning as it provides exciting and interesting method of learning for knowledge retention. Thus we conclude that e-resources are useful tool for students in addition to conventional lecture based teaching learning process and it to be encouraged by teacher during first year of students medical curriculum.

## ACKNOWLEDGEMENT

I/We are very much thankful to our first MBBS medical student for participating in this questionnaire based survey without whom this educational project would not have been completed successfully.

## CONFLICT OF INTEREST; NONE

## REFERENCES

1. Md. Maidul Islam, and Umme Habiba, "Using Pattern of Internet and E-resources by the Students and Faculty Members of a Private University in Bangladesh." *American Journal of Educational Research*, vol. 3, no. 5 (2015): 541-546.
2. Kisham Sangeeta, Tongbram Shushilkanta Singh. Use of Internet by the Students of Social Sciences, Manipur University: A Study, 10th Convention PLANNER-2016 NEHU, Shillong, Meghalaya, 09-11 November, 2016 © INFLIBNET Centre, Gandhinagar, Gujarat.
3. Iqbal Bhat and Mahesh V. Mudhol. Use of E-resources by Faculty Members and Students of Sher-E-Kashmir Institute of Medical Science (SKIMS) *Journal of Library & Information Technology*, Vol. 34, No. 1, January 2014, pp. 28-34.
4. Baskaran C. User perception of library services in academic institution in the southern districts of tamil nadu, India: A Case Study" (2011). *Library Philosophy and Practice (e-journal)*, Paper 465. <http://digitalcommons.unl.edu/libphilprac/465>
5. Papatergious and Solomonidou, C. 2005. Gender Issues in Internet Access and favorite Activities among Greek High School Pupils Inside School, *Computers and Education*, 44(4), pp.377-393.
6. Anand y. kenchakkanavar. Types of e-resources and its utilities in library. *International Journal of Information Sources and Services*, vol-1, Sept- Oct.:2014: issue2, pg97-104.
7. S. Dhanavandan, M. Tamizhchelvan. An Evaluation of E-Resources in Academic Libraries in Tamil Nadu. *Journal of Emerging Trends in Computing and Information Sciences*. Vol. 3, No. 3, March 2012 ISSN 2079-8407.
8. Joe Varghese, Minnie Faith and Molly Jacob. Impact of e-resources on learning in biochemistry: first-year medical students' perceptions. *BMC Medical Education* 2012, 12:21. <http://www.biomedcentral.com/1472-6920/12/21>.
9. Habiba, U. and Chowdhury, S. (2012), "Use of electronic resources and its impact: a study of Dhaka University Library users", *Eastern Librarian*, Vol. 23 No. 1, pp. 74-90.
10. Bhat MI (2017). Familiarity and Use of Electronic Information Sources by Bed College Students of Government College of Education, Srinagar J&K. *India. Inter. J. Acad. Lib. Info. Sci.* 5(1): 38-43.
11. Achonna (2008). Awareness, Access and Usage of E-Journal Resources of the Library, by the Students of Yaba College of Technology, Yaba -Lagos Nigeria. *Samaru Journal of Information Studies* Vol. 8 (1) 2008: pp. 26-34.
12. Mulla, K.R. (2011), "Use of electronic resources by faculty members in HKBK College of Engineering: a survey", *Library Philosophy and Practice (e-journal)*, Paper 593, available at: <http://digitalcommons.unl.edu/libphilprac/593> (accessed 5 October, 2014).
13. Mishra (O P), Yadava (Neelam) and Bisht (Kamini) (2005). Internet Utilization Pattern of Undergraduate Students. *University News*. 43(13); pp. 8-12.
14. Biradar (B S), Rajashekar (G R) and Sampath Kumar (B T) (2006). A study of Internet usage by students and faculties in Kuvempu University. *Library Herald*. 44(4); pp 283-294.
15. Arthur, C. and Braf, P.O. (2013), "Internet use among students in tertiary institutions in the Sunyani Municipality, Ghana", *Library Philosophy and Practice (e-journal)*, Paper 859, available at: <http://digitalcommons.unl.edu/libphilprac/859> (accessed 13 October, 2014).
16. Bin Ghouth, A.S. 2008. Using Computer and Internet for Medical Literature Searching Among Medical Students in Hadramout University, Yemen. *Online J Health Allied Scs.* 7(1):6.
17. Agrawal Sumit S and et al. Pattern of internet use among medical students: A cross sectional study. *Asian journal of science and technology*, vol. 6, issue 04, pp. 1285-1288, April, 2015
18. Hamid r Jamali, david Nicholas, and paul Huntington (2005) The use and users of scholarly e-journals; a review of log analysis studies. *Aslib proceedings*, vol 57, iss 6 pp 554-571.
19. Singh B, Gupta R, Garg R. 2013. Study of medical students and internet usage. *International Journal of Scientific and Research Publications.* (5):1-5.