

**Use of E-Resources by the Medical Students of Selected Medical Colleges in Bangalore**

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**Abstract**

This paper reports usage and experience of e-resources medical students at selected medical colleges in Bangalore. In this study it is try to verify and evaluate the purpose, frequency, reasons of using and place of student's access to e-resources. A well structured questionnaire was administered to the 100 medical students. The response rate was 78% (45 from Postgraduates and 33 from Undergraduates students). The result of study reveals that most of P.G. and U.G. students state that e-resources are informative as well as update the medical knowledge. Search engine and medical research reports are used highly among the students. Further study shows that undergraduate students use e-resources daily and spent more time as compared to P.G. students. It is found that maximum students are aware and use e-resources of library. The satisfaction of medical students is not high with regard to e-resources. Study also reveals that PG students feel that e-resources are time consuming and face slow downloading whereas UG students face virus, slow downloading and feel more expensive of using e-resources.

**Keywords:** E-resources, use of e-resources, e-journals, Medical Student

**Introduction**

The developments in computing technology changed in all fields of education with transacting of information society to the digital world where people access and use information every day faster and easier. E-resources have become highly important learning and teaching aids in almost every field of science. It has created a great revolution in the field of medical publication, data storage and retrieval as a new medium. In medical education, they are of particular interest for the study of anatomy. In this field, the availability of visual information is essential to obtain a functional three-dimensional (3D) image of the human body and its tissues.

The tremendous growth of medical information publication available in various formats as fast as possible is needed which definitely requires information and communication technology. In order to work in compliance with this evolution, medical students need the awareness, skills for management of information and communication effectively and efficiently and the ability to utilise various facilities and equipment in the electronic databases. Also, with development of e-resources collection in various universities are growing, presently we see the increasing demand of e-resources by medical students in the competitive time of education and research in all over the world.

E-resources have become as boon to the medical students and attract them in the digital environments in their limited amount of time. Use of e-resources by medical student may up-to-date knowledge in their respective subject field and to improve the quality of learning, growing rapidly and play a vital role in education and research. Medical students today are very comfortable with electronic resources that have become an integral part as well as facilitate self-directed learning among them. With the rising use of e-resources in higher education, an ever-increasing amount of research has been conducted into its educational value.

However, such research has been found to focus on student usage pattern of e-resources. When developing e-resources in medical education, student need to understand not only their academic value, but also how they use and experience of e-resources. Students need more

guidance of the limits of individual logs to a source of information and more assistant to access the clinical data of broader resources such as databases.

### **Review of Literature**

Research into the use of the Internet electronic sources for teaching and research by English Literature academics at six Welsh higher education institutions, lists some of the questions raised by the study and describes the research methodologies. The findings indicate a mixed response to new technologies and Internet usage (Shaw, 2000). The participants of the Internet training courses held in Iceland from 1993 to 1998, found that the Internet was interesting and useful, with positive advantages over other media and for some, use was constrained by perceptions that needed greater understanding (Klobas and Clyde, 2000). Surveys were administered to 548 students from three regional universities in the southeastern USA it determine how many students regularly use the Internet, how many hours per week do the regular users spend on the Internet, and what computers they use. Information was tabulated for use of e-mail, use of the Internet to obtain university information, and for the number of students who had home pages. The respondents of the study consider the Internet to be fad; project their future use of the Internet to be less, the same, or more than new; and project they will use the Internet in their chosen careers (Perry and Others, 1998).

Internet is primarily used for research as 78.43 percent ranked it first priority followed by teaching as 23.52 percent an 33.33 percent ranked it first and second. It is most useful for academics for research activities (Lakshmi, 2003). The level of utilization of the Internet for academic research at the Obafemi Awolowo University, Ile- Ife, Nigeria showed that the use of the Internet ranked fourth (17.26 percent) among the sources of research materials (53.42 percent) second to electronic mail (69.86 percent) and conclude that the use of the Internet for academic research would significantly improve through the provision of more access points at Departmental and Faculty levels (Jagboro, 2003).

### **Need and purpose of the Study**

The Karnataka state has many well recognized medical colleges to be among the top medical colleges in India. The aim of the study is to determine the extents use of library and information for medical information among students of selected medical colleges in Bangalore. Health care professionals face several problems like information on clinical practice is not distributed, contents are distributed with various sources, difficult to search and difficult to retrieve.

For better understanding about the medical information needs of students and the method accessing information from the various sources by which they locate the information the present study is focused on these issues specific to the use pattern of library by Medical students from selected medical colleges in Bangalore.

### **Objectives of the Study**

1. To identify the type of e-resources used by the medical students
2. To find out the search patterns used by students for accessing e-resources
3. To know the purpose of using e-resources by the medical students

### **Hypotheses of the Study**

**The following null hypotheses were formulated and tested by employing chi-square statistical tool.**

H1- There is no significant difference between the PG and UG medical students in using the various types of e-resources.

H2- There is no significant difference between search strategy of PG and UG medical students for accessing e-resources.

H3– There is no significance difference between the PG and UG students for the purpose of using e-resources.

### **Research Methodology**

The study is limited to use of the e-resources by post and under graduate students of the Institute of selected Medical Sciences & Research at Bangalore. This study is based on survey method. The questionnaire tool was used to collect primary data from the medical students. A total 100 questionnaires were distributed randomly among medical students. Out of which 45 from postgraduates (MD/MS) and 33 from the undergraduates (MBBS) students received back with 78 % response rate.

### **Major Findings of the Study**

Students were asked to locate the type of e-resources frequently used. It is clear that maximum number of PG and UG students frequently used search engines (18 PG and 13 UG) and E-research Report (15 PG and 20 UG). 6 of PG and 3 UG gave the preference to video to use. However, UG students did responded regarding the usages preference of e-journals, e-books, ETD, e-encyclopedia, and online databases.

The calculated value of  $\chi^2$  (26.45) is greater than the critical value (18.4753), i.e.,  $26.45 > 18.4753$ . This shows that there is a significance difference among the PG and UG medical students to use the various types of e-resources; it has found that maximum number of students used e-research reports. It is identified with the statistical analysis of Chi-square the structured hypothesis H1 is rejected at 0.01 level of significant. Every user has a nature to access e-resources with different approach. An attempt was made to know which approach is mostly used among PG and UG medical students.

E-resources followed by subject (24 PG and 14 UG students). 23 PG students and 6 of UG students used author for accessing e-resources. The study further shows that UG students have no response the usages of DOI. The chi square is significant at 0.01 level of significance. It is indicated that there is significant variation among PG and UG student usages search strategy to access e-resources and based on the statistical result the structure null hypothesis H2 is rejected.

For communication equal number of PG and UG students use e-resources and 4 of PG and 2 of UG use e-resources for other purpose. Therefore, UG students have no response to the query of e-resources usages for patient care, health information, to access PubMed, medical databases access and entertainment. The calculated value of chi-square is less than critical value, i.e.,  $16.15 < 21.6659$ . There is no significance difference between the PG and UG students purpose to use e-resources. The decision is accepted the null hypothesis H3.

Study highlights the response of students regarding the reason for using e-resources. The data from the table describes that maximum numbers of students', i.e., 24 of PG and 30 of UG state that e-resources are more informative, 6 numbers of PG and 3 of UG students response that e-resources are time saving and more useful. It is to be noted from the table that UG students give no response to the query of easy to use and less expensive, while PG students have the opinion that e-resources are easy (12) to use and less expensive (6). The chisquare test shows that there is significant variation among the PG and UG student reason for using e-resources.

To know the access frequency of e-resources, students were asked how frequently they use e-resources. It is clear from Table 5 that 18 numbers of PG students use e-resources daily, 21 use once a week and 6 numbers of PG students use e-resources more than once a week. Whereas UG students give the response that they use e-resources daily.

### **Conclusions of the Study**

Today all type of medical information is available in electronic formats. The e-resources play a drastic role among the medical students community in accessing and sharing of information. E-resources keep medical students up-to-date over traditional resources. The present study is

conducted with the objective to know the e-resources usage patterns among the postgraduate and undergraduate medical students at selected medical colleges in Bangalore.

The study found significant difference among PG and UG students in relation to the use of various types of e-resources, search strategy, reason for using e-resources and access frequency except purpose. However, result shows that medical students frequently used search engines as well as e-research report by title and subject of the required information for updating medical knowledge. The result of the study shows that maximum medical students state that e-resources are more informative. All the undergraduate students use e-resources daily and spent more time than the postgraduate students. It is interesting to note that a large number of students are aware of the e-resources from library notice/e-mail and colleagues, and use library to access the e-resources. The result of the study found that the satisfaction level was not high among PG and UG students on usage of e-resources.

The study also finds out the major problems PG students feel for using e-resources are time consuming and face slow downloading whereas UG students face virus, slow downloading and feel that using e-resources makes it more expensive. To develop a fully e-educational environment and reducing the problems of students, it is needed to develop a modern digital infrastructure. It is evident from the study that medical library of selected medical colleges in Bangalore is leading to create environment for the attraction of the students. Therefore, much more is need to be done to make maximum access of e-resources. E-resources are easy to access at any place any time, provide right information at right time, and have become widely used tools in medical literature and patient care education today as well as have benefits over traditional educational resources. Every academic Institute provides different facilities and services to its students. Library is one of the most important facilities among students to grow the carrier.

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