Use of Electronic resources by students of SDM College of Medical Sciences and Hospital, Dharwad: A case study

Girimallesh H. N.

Department of Library and Information Sciences,
Karnatak University, Dharwad 580003, India

Abstract: **In the current years electronic resources (e-resources) such e-journals, data files and open access web-sites have revolutionized the learning process of medical students when compared to traditional resources such as lectures, textbook and tutorials. In the context of this, current study was carried out to assess how electronic resources are utilized by the medical students of Sri Dharmastala Manjunatheswara College of Medical Sciences and Hospitals (SDM), Dharwad. The study was carried out through a structured questionnaire by taking representative sample of researcher scholars and scientists. The results revealed the electronic resources are quite useful to medical students and these are good alternatives compared conventional print resources or hard copies. Digitalization of medical college libraries is quite useful for dissemination of knowledge among medical students.**

Keywords: **E-resources, data files, SDM College of medicinal sciences, medical students**

1. Introduction

In the recent years, there has been rapid expansion the e-resource utilization by medical students and e-resources have revolutionized their learning process (Wynter et al. 2019). Therefore, medical college libraries of western countries like United Kingdom, France and Germany and North American countries such as United States and Canada, are equipped with e-materials such as online electronic resources, web sites – open access and full texts, electronic journals and data files (Daies et al. 2012; Grasso et al 2006). Indian medical colleges are still following traditional teaching and learning methods namely, lectures, text books, and tutorials (Rajedra Kumar 2016). These students hardly get time for reading and learning process since they are attached to medical hospitals as trainees. E-resources are becoming popular learning and information resources among Indian medical students also; therefore, various medical colleges and universities in India are involved in digitalization of their library resources. The present study has been planned and executed in order verify status of e-resource utilization in Sri Dharmastala Manjunatheswara College of Medical Sciences and Hospitals (SDM), Dharwad.

1.1. Need for the study

India has highest number of medical colleges in the world and the medical education system is suffering from misdistribution, traditional curriculum, poor assessment and lack of modern learning programmes. To promote innovation and meet the global standard in medical education, India needs to transform its medical curriculum, teaching and learning methods, increasing faculty and promoting research (Solanki and Kashyap 2014). To evaluate the impact of e-resources among the medical undergraduate and post-graduate students we have chosen Sri Dharmastala Manjunatheswara College of Medical Sciences and Hospitals (SDM), Dharwad and survey was conducted and the out coming results are presented here.

1.2. Objectives of the study
i) To examine the awareness of e-resources
ii) To analyze how e-resources are utilized by medical students
iii) To assess the problems faced by medical students in accessing and utilization of e-resources
iv) To find out the ways and means for improving the collection of e-resources in medical colleges

2. Methodology

Undergraduate and postgraduate medical students were the target population in the current study. The survey has been conducted by using questionnaire to collect the data in order to achieve the above mentioned objectives. Questionnaire was distributed among medical students and out of 400 questionnaires supplied 360 respondents who thoroughly answered varied quires data was used for analysis.

3. Analysis and interpretation

3.1. Awareness of e-resources by respondents

The data on awareness of e-resources among medical students was carried out and results are presented in Table 1. One hundred seventy eight (55.63%) students were aware of e-resources and 142 (44.37%) were not aware of e-resources. From this data it is evident that medical students are familiar with e-resources.

Table 1 Awareness of e-resources

Sl. No.	Frequency of respondents	Percent
Familiar of e-resources	178	55.63%
Unaware of e-resources	142	43.37%
Total	320	100.00%

3.2. Types and frequency of e-resources chosen by respondents to locate information

Medical students were also enquired about the frequency of use of e-resources and utilization of resources in their learning process (Table 2). Good numbers of medical students are using e-books and journals for getting information, 110 (34.28%) refer on daily basis, 33 (20.63%) 2-3 times in a week, 68 (21.25%) once in a week, 26 (8.12%) once in a month and 50 (15.62%) are not using e-books and journals. Medical students are also using online resources for collection of information, 30 (9.87%) use daily, 46 (15.38%) 2-3 times in a week, 50 (15.63%) once in a week, 82 (25.05%) once in a month. Similarly, medical students also utilizing CD-ROM databases, 88 (27.50%) use on daily basis, 54 (16.88%) 2-3 times in a week, 70 (20.87%) once in a week, 46 (14.38%) once in a month.

Table 2 Types and frequency of e-resources chosen by respondents to locate information

Type of e-resources used	Frequency (%)					Total
	Daily	2-3 times in a week	Once in a week	Once in a month	e-resources are not referred	
e-book and journals	110 (34.28%)	33 (20.63%)	68 (21.25%)	26 (8.12%)	50 (15.62%)	320 (100.00%)
Online resources	30 (9.37%)	46 (14.38%)	50 (15.63%)	82 (25.02%)	44 (13.75%)	320 (100.00%)
CD-ROM databases	88 (27.50%)	54 (16.88%)	70 (21.87%)	46 (14.38%)	62 (19.37%)	320 (100.00%)

3.3. Purpose of using e-resources

The distribution of medical students on the usage of e-resources is shown in Table 3. 114 (31.66%) were using e-resources for learning process or to collect subject information, 139 (38.61%) were using for finding relevant information in their area of their specialization, 107 (29.72%) were using to collect research information on medical subject.

Table 3 Purpose of using e-resources

Purpose of using e-resources	Respondents	Percentage
To collect subject information (learning process)	114	31.66%
For finding relevant information in their area of research or specialization	139	38.61%
To collect research data and information	107	29.72%
Total	360	100.00%

3.4. Search fields used to access e-resources

It is evident from the data that, medical students used varied search fields such author/s, keyword/s, subject, date of publication, title of the articles and abstract/s to access information from e-resources (Table 4). Survey reveals that, 96 (30.00%) medical students use subject as search word, 94 (29.37%) respondents use keyword/s as field of resources search, 60 (18.75%) use title of the article/s as field of resource search. Similarly, 38 (11.87%), 24 (7.50%) and 8 (2.25%) of the respondents use author name/s, abstract and date or year of publication as search filed in accessing information via e-resources.

Table 4 Search fields used by respondents to access e-resources

Search fields used by respondents to access e-resources	Respondents	Percentage
Author	38	11.87%
Keyword/s	94	29.37%
Subject	96	30.00%
Date or year of publication	08	2.25%
Title of article/s	60	18.75%
Abstract	24	07.50%
Total	320	100%

3.5. Problems faced while accessing E-resources

Respondents were enquired to give their opinion on problems faced by them while accessing e-resources and data is given in Table 5. Majority of researchers (121- 37.81%) opined that slow internet speed was main problem in accessing e-resources. Similarly, 34.37%, 27.81% of researchers are of the opinion that inadequate ICT infrastructure, lack of information literacy respectively were the factors in hindering access of e-resources.

Table 5 Problems faced while accessing E-resources

Particulars	Number	Percent
Slow internet speed	121	37.81%
Inadequate ICT infrastructure	110	34.37%
Lack of information literacy	89	27.81%
Total	320	100.00%

3.6 Opinion about usefulness of e-resources

Data on level of satisfaction by the e-resources users is presented in Table 6. Two hundred sixty eight (80.62%) medical students are of the opinion that they are satisfied information obtained by e-resources, however, 62 (19.37%) were opined that they are not happy with the information obtained by e-resources.

Table 6 Opinion about usefulness of e-resources

Opinion about usefulness of e-resources	Respondents	Percentage
Satisfied	258	80.62%
Not satisfied	62	19.37%

4. Results and discussion

Current survey on utilization of electronic resources by UG and PG students of Sri Manjunatheswara Medical College, Dharwad reveals that 55.65% of students are aware of e-resources (Table 1). Majority of students are using e-books and journals and other e-materials on daily bases (34.28%), others are using e-resources 2-3 times in a week and once in a month (Table 2). The purpose of using e-resources by medical students was to collect subject information (31.66%), for finding relevant information in their area of research or specialization (38.61%) and to collect research data (29.72%). Medical students are searching literature or information by subject as field of search (30.00%) and appropriate keywords (29.37%). Other medical students were using were using author as such word (11.87%), title of article/s (18.75%) and date or year of publications (2.25%). Medical students at Sri Manjunatheswara Medical College, Dharwad have faced the problems such as slow internet speed (37.81%), inadequate ICT infrastructure (34.37%) and lack of information literacy (28.81%). Over all 80.62% of medical students were of the opinion that they are happy with e-resources available to them (Table 6). Medical students elsewhere are very much attracted toward online information sources service in the current years (Judd and Elliott 2017). Similar trend was observed in the current studies. Learning activities are typically well-supported with resources delivered through institutional learning platforms, while college and university libraries provide access to online collections of reliable and authoritative biomedical science and clinical resources.

5. Conclusion

It is evident from the current study that e-resources should be integral part of University and college libraries and are useful in accessing information. It is recommended the authorities of Sri SDM college of Medical sciences and Hospitals, Dharwad to facilitate high-speed computer terminals at college library and departments, uninterrupted power supply and good systems should be provided to the students. The library web page should be designed in such a way that it should provide information and guidelines

for utilization of e-resources. Library personnel should conduct short term training course on ways, means and procedures to access e-resources.

References

Wynter L, A Burgess, E Klman, J E Heron and J Blesel (2019) Medical students: what education resources are they using? BMC Medical Education 19:36

Davis BS, J Rafuque, T R Vincent, J Fairclough, MH Packer, R, Vincent, I Haq (2012) Mobil medical education for undergraduate clinical students – a mixed methods study. BMC Medical Education 12: 1

Grasso MA, MJ Yen, ML Mint (2006) Survey of handheld computing among medical students. Computer Methods Progress Biomedicine 82: 196-202

Rajendra Kumar (2016) Use of E-resources by medical students of M.M. University, Ambala: A case study. DESIDOC Journal of Library and Information Technology 36: 10-16

Solanki A and S Kashyap (2014) Medical education in India: Current challenges and the way forward. Medical Teacher 1-5

Judd T and K. Elliott (2017) Selection and use of online learning resources by first-yea medical students: Cross-sectional study. JMIR Medical Education 3: e17