# Usage Pattern of E-Resources by Students of Medical Colleges in Karnataka: A Review Vedamurthy Y N Dr. Janardhana Rao A N

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#### **Abstract**

Medicine aims at promoting 'Health for all' and to produce 'Physicians of first contact' which depends on quality medical education and the outcome of which is to deliver quality of health care. Medical college libraries took various enhancements with the use of innovative information delivery methods while providing medical information resources and services. The study aims to investigate the attitude towards the use of library for accessing medical information needs by the medical students from 10 medical colleges located across Karnataka, Survey method was adopted and questionnaires method was used as a data collection tool. A total of 100 questionnaires were distributed to students and 78 medical students were ultimately returned giving a 78% response rate. The result of the study reflect on usage of library, purpose of use resources, using web resources for medical information needs, difficulties in obtaining required information and problems faced while accessing the medical information resources in the library have been discussed.

**Keywords:** Medical information resources, library services, internet, medical libraries, and health information

## Introduction

Introduction of medicine is a field where the practice of health-care evolved to maintain prevention and treatment carried out in human beings. Current medical education aims at understanding the crucial role of doctors in society, the need for continuing education and health care. Medical information needs are important because faculty and students engage in medical practice need specific and recent information for the patient care. Library professionals serving in medical institutions require thought understanding about the varied factors and forces influencing such services and the best way to deal the medical information needs of the medical students.

The concept of health is no longer limited to the absence of disease, today it encompasses the physical, mental and social wellbeing of each individual. Significant changes in health care knowledge and need for medical information at the point of care have changing practice of library services. The library activities from selection of materials to their directed use emphasized those aspects which are remedial and therapeutic, faculty and students of health-care institution should be encouraged to use the library collection for their medical information needs.

The revolutionary changes in information and communication technologies changed the way of information is stored, retrieved and disseminated, it is the responsibility of libraries to satisfy medical information needs so they are timely and accurate in nature. The availability of medical information on the web has changed the way of information searching in recent years. Information needs and use by medical students for medical practice has continued to be a hot topic of research in recent years. Services provided by medical college libraries depends not only on funding, whether received form one or more levels of government or form private sources, but also on the competence and commitment to the concept of optimum utilisation of web-based medical information resources and services.

Medical library professional due to cost constraint and support by the management are facing problems to balance on cost effectiveness and fulfil the needs of students. Library professionals have to develop a suitable discovery tool for search, retrieved and delivery of

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information, by which they can evaluate the impact and develop suitable models for medical information delivery.

Nowadays, there are various online sources available library professional has to take a step towards so that the student should be encouraged to take up to enhance his/her knowledge as medicine as a branch demands exhaustive dedication and continuous learning. The present study aimed to determine the extent use of library for medical information needs among the students of medical colleges in Karnataka and discussed about various types of medical information resources and services provided to deliver medical information to medical students.

#### **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, IIe- 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 medical colleges in Karnataka State. 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. Hence, it is necessary to find:

- a. How the students prefer to get information from the library
- b. What are Medical Information Resources and Services available in the library? What is the awareness among the students of medical colleges about available online medical information resources and services
- c. What is the role of library while providing the clinical information.

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 medical colleges in Karnataka.

## Objectives of the Study

- 1. To study the purpose of use of library resources in medical college
- 2. Examine knowledge of search & access of various medical information products and services available in library.
- 3. To find out existing resources on medical information and use of resources in the library by students.

## Research Methodology

A questionnaire based survey method has been chosen to the study. For the study medical students from following 10 constituent medical colleges in Karnataka

## **Data Analysis**

The study covered students from 10 medical colleges located across Karnataka State. 100 questionnaires, i.e., 10 questionnaires per college were randomly distributed to collect relevant data. A total of 100 questionnaires were distributed to students by personal visit, out of 100 questionnaires, 78 were received back giving a 78% response rate, which can be considered good, taking into account the difficulties faced with this data collection.

## Findings and Suggestions of the Study

## Major findings for this study are as follows:

Demographic Characteristics of Medical Students

- (a) Maximum numbers of respondents are male (53.96%)
- (b) Majority of respondents is under the age group below 30 (61.76%)
- (c) Majority of the respondents are studying in graduate level (41.82%).

## Library Access and Usage

- (a) 94.63% of respondents claimed that they access library facilities
- (b) Majority no of respondents (30.54%) of respondents visit library twice a week
- (c) To access journals (44.19%) of respondents always met the library, (42.43%) of respondents for books and (33.92%) of respondents visit the uses to Internet and (31.22%) of respondents visits library to access e-databases.

#### **Information Resources**

- (a) 43.38% of respondents use print books, further 42.43% of respondents use journals available in the library, concern to e-resources, 42.43% of respondents most of time depend upon e-journals and 41.22% of respondents claimed they use e-books for required information from the library
- (b) 95.41% of respondents agreed they obtain information related to clinical practices from the library, 31.73% of respondents were 'Always' use Journals, 28.75% and 32.72% of respondents 'Most of the time' uses Books and Web-based resources as a sources of clinical information from the library.

#### **Medical Information Resources**

- (a) Most of the students, i.e., 42.87% prefer electronic version, 43.51% of respondents opted for PDF format and 97.43% of students prefer Full-text format
- (b) 31.42% of respondents expressed internet play key role providing medical information resources
- (c) 29.19% of respondents were 'Always' using e-journal databases, & 34.46% of respondents expressed 'Most of the time' they use clinical guidelines sites

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- (d) E-journals and e-books are the most used sources to get required information 27.57% of respondents 'Always' uses e-journals and 28.92% respondents stated that 'Most of the time' they referred E-books
- (e) Majority of students felt Web-based information resources are substitute for library (f) Medical students obtain clinical information from various clinical databases like Access Medicine, BMJ, Embase, MD Consult, Scopus, UpTo Date and other database.

## Satisfaction towards Medical Information Resources and Services.

- (a) Compared to print to electronic considering the factor including such as time, coverage, cost, flexibility, and effectiveness respondents are more comfortable with electronic compared to print (b) 32.16% of respondents felt that web-based clinical Information resources are substitute to library
- (c) 81.35% of respondents said they were aware about Training/Orientation Class, followed by 72.84% of respondents are aware about database searching, 66.89% of respondents are aware about internet based information resources and services provided by the library
- (d) 72.74% of respondents are aware about library OPAC, 72.84% of respondents aware about Digital Library Services provided by the library
- (e) 84.05% of respondents said they are satisfied with the existing library collection and service
- (f) Limited access to computers, lack of IT knowledge, lack of user education program is major problem faced by the medical students.

## Suggestions of the Study

Addressing the attitude towards the use of library resources and services for medical information needs researcher recommends following suggestions to improve the services provided by Medical colleges. To achieve the effective clinical information delivery medical library profession regularly analyse the ICT Infrastructure. The adoption of ICT should not be considered as a luxury, but as an added tool to provide the current information effectively to fulfil the complex needs of the user. It is recommended that the Medical Libraries should be equipped with advance collection of electronic resources and digital library facilities and it is recommended that data access speed (Networking Infrastructure) should be increased. To solve cost constraints, financial crunch among medical colleges effective consortia framework model should be developed. There is need for Web scale discovery tools; semantic web technologies to effectives retrieve clinical information resources. There is need for accurate and relevant clinical information delivery for medical students required so need based resources has to improve at the time of subscription. For effective information retrieval provision should be made with adequate training on information searching skill to medical library staff and students. Library professionals have to promote existing services popularising using extension activities and social networking applications better utilisation of library services.

#### Conclusions of the Study

Medical librarian's involvement in patient care plays and an important role in medical care and the medical library professional should be trained in manner which facilitates to be more aware about better contribution and access to clinical information delivery. This study indicates the attitude towards the use of library for medical information needs from ten medical colleges in Karnataka. The response to the survey showed medical students are well aware with existing clinical information resources available in the library. Despite the perceived benefits of e-resource related to clinical information resources there are some barriers like lack of infrastructure, lack of network facility and lack of training are the major barriers to access required information. However, it does appear that the medical sources are valuable asset to medical practices for medical students and proactive steps should be taken

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to overcome the existing problem at the medical college libraries. Also there is a need for radical changes and innovations in the structure and process of medical information at all levels to cope with the explosion in medical knowledge in the changing conditions in the health care information delivery system.

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