Abstract

The principal aim of the present research was to see how information technology effects in the development of different activities in the medical libraries and information centers (MLICs) of IMSU, Iran. Information Technology (IT) has opened windows to whole realm of activities ranging from the elementary to the more complex. Such information is increasingly being made available electronically, via hybrid library services. In the other hand the quality of medical research depends largely upon the efficient interchange of information. Therefore the research about IT in the field of medical and health sciences is both timely and important, because, the medical knowledge of doctors at all levels can be enhanced very quickly. Necessarily, such a rapid transmission of knowledge especially to doctors in medical science universities will be of great benefit in patient care. The use of the technology in the academic libraries, by directly communicating with the doctor as a part of their service and commitment to patient care can make a very significant contribution in building up their knowledge base. In addition, physicians and clinicians and researchers in the field of medicine generally require newest information. The present study deals impact of IT on the development of collection, services, and technology in MLICs. The researcher has delineated following objectives:
• To study the background of medical libraries and information centers in IMSU (IRAN).

• To examine the services and facilities rendered by medical libraries and information centers to the users.

• To study the digital collection of medical libraries and information centers (MLIC).

• To find out the awareness and use of digital resources by the users.

• To trace the problems and difficulties in adopting IT in medical libraries and information centers.

• To suggest ways & means to overcome problems faced by the medical libraries and information centers.

The present research work has been divided into following seven chapters:

Chapter I is an overview of the entire research work, which includes the brief introduction, need for the present study, scope of the study, objectives of the study, research methodology, review of literature, and Chapterization. Chapter II is about the medical science in Iran. It covers history of medical sciences, education system, higher
education, and health care system in Iran. Chapter III discusses about the medical information and technology. This chapter further includes medical libraries & information centers, information technology and medical libraries, its collection and services. It also covers medical informatics, and medical information in Iran. Chapter IV presents information about (a) faculties which includes Faculty of Medicine, Faculty of Dentistry, Faculty of Pharmacy and Pharmaceutical Sciences, Faculty of Nursing and Midwifery, Faculty of Health, Faculty of Management and Medical Information, and Faculty of Rehabilitation Sciences, (b) research centers which consists Medical Education Development Center (MEDC), Isfahan Endocrine & Metabolism Research Center (IEMRC), Skin Diseases and Leishmaniasis Research Center (SDLRC), Behavioral Sciences Research Center (BSRC), Infection Diseases and Tropical Center (IDRC), Isfahan Cardiovascular Research Center (ICRC), and Isfahan Medical Student Research Center (IMSRC), and (c) Al-Zahra hospital under Isfahan Medical Sciences University. Chapter V gives information about databases that are accessible through Central Library (IMSU) on the Internet and Intranet such as Blackwell, Books in Print (BIP), Chemical Abstract Service (CAS), CINAHL, EBM Medline, Elsevier, ERIC, Image.MD, Ingenta, IPA, ISA, MD Consult, MEDLINE, Ovid, Oxford Journals, Proquest, SERFILE, Springer Journals, Ulrich's, and UpToDate. Chapter VI includes analysis of
data that are collected from medical libraries and information centers, and users of these LIC. Finally Chapter VII presents observations, finding, suggestions, conclusion, and recommendations for further studies. The appendices such as “List of LICs affiliated to IMSU”, “Questionnaires”, “the table of Krejcie and Morgan (1977)” and Bibliography are given at the end.

Investigator studied 84 Medical libraries and Information Centers affiliated to Isfahan Medical Science University (IMSU) of Iran. Descriptive method and survey technique was used for the study. Questionnaire tool was used for collecting data from users and MLICs affiliated to IMSU separately. It is observed that the Isfahan Medical Sciences College Library at Isfahan University was established in the year 1947, as a part of the Central Library of the university. In 1988 it developed as Central Library of Isfahan University of Medical Sciences. Central Library at the IMSU, first, developed an integrated medical search system, called “MEDLINE CENTER” with funding from the Medline CD-ROMs in the year 1990. In the year 1992 Central Library purchased commercial library-oriented package called as Pars-Azarkhsh, a Persian version of CDS/ISIS. This software manages the union catalogue of the Central Library called as “Central Library Books & Journals Database” (CLBJD). It is concluded that the impact of IT on the development of medical libraries and information centers affiliated to IMSU is seen mostly in academic
libraries as compared to the hospital libraries. IMSU have adopted technological changes and computerized most of their libraries and information centers and are working though online, but hospital libraries will take some more years for complete computerization. The Central Library and libraries affiliated to IMSU provide common library services. It is noticed that majority of these libraries provide circulation, reference, documentation, reprography and computer-oriented services. Also use of computers in providing library services is common in IMSU. Digital information has made a great impact on the library and information centers. From the data received, it is revealed that majority of these MLICs are providing digital library facility to their users. At present most of the MLICs are acquiring information in digital form and they are managing and maintaining (storing) this information for future use. Central Library is not holding the whole collection but it plays manager role for affiliated MLICs. All the MLICs except Central Library are rendering free services in using the library collection, CLBJD, and CLN on-line databases.

The trend of collection development is changed in MLICs. Due to development of IT, one can manage within the limited resources and give better access to the user in these centers. Digital resources have brought many changes on the development of MLICs as well as information environment, which is changing due to the introduction of
IT. There are three types of digital databases available on the CENT-LIB network in IMSU. These digital databases are:

- Online databases accessible through IMSU web site.
- Offline databases available through CENT-LIB LAN Network. These databases are only accessible in the university campus and in the faculty libraries and Al-Zahra Hospital library.
- "Central Library Books & Journals Database" is available in Central Library homepage and CENT-LIB LAN Network.

Electronic information sources in MLICs have become important library resources. CLBJD gives access to the catalogue of MLICs collections; offline databases of Central Library Network give access to the periodical literature in different subject fields. Some of the CD-ROMs in the MLICs complement the printed form of the resources. The library collection can be used optimally if the users can work with these tools. Central Library subscribed Offline databases in CD-ROM. Such as MEDLAR, LCB, ISA, IPA, ERIC, MELI, Serfile, CAS, BIP, CINAHL, and Ulrich Periodical Directory. Also this center subscribed online databases, such as Springer Journals, Oxford Journals, Ovid Journals, Ingenta, Proquest, Blackwell, Elsevier Science, EBM Review, Ovid Medline, ERL5Medline, UpToDate, Image-MD, and MD.Consult. When it compares with the use of online
and offline databases in IMSU, it appears that use of offline databases is less as compared to online databases. From the data, it is concluded that selection of digital resources by the MLICs, is proper. In general digital resources in MLICs are sufficient.

Among all the MLICs, Central Library and faculty libraries affiliated to IMSU are very rich in digital information and technology tools. There is increasing trend towards computer technology (availability, familiarity, and use) in MLICs. The use of computers is increased with latest hardwares and softwares configuration. The scope of utilizing modern IT in the ALICs is very fast. Application of these technological developments will ultimately solve many problems and to handle the information most efficiently and effectively. Though IT will not replace the traditional activities totally but it will complement to them.

It is also observed that there was little or no awareness about digital resources available in the MLICs affiliated to IMSU. Though the statistics were recognized as important, there is directly relationship between the scales of familiarity and use by the user.

On basis of the data the libraries and information centers have faced the problems like corruption and deletion of data, low speed connectivity, shortage of hardware facilities, distance between the center and central library, lack of experienced staff. In addition, to
these libraries also facing inadequate financial resources to fully pursue automation. It was also observed that they do not have proper guidelines for automation of the libraries. These above stated problems need immediate attention of the authority and continuous support from administrators in their parent institutions, so that adequate library resources and services are made available to fulfill the information needs of the health care community and improve the quality of patient care in IMSU. In order to design better plan properly, to provide due recognition to MLICs system and also to make more effective medical information system in IMSU, some suggestions have given in the end.