Chapter - 1

INTRODUCTION
Chapter - I

INTRODUCTION

1.1 Introduction

Journals constitute an important part of a library collection being the most important vehicle for global scholarly communication. Tremendous developments in ICT in the recent years have given amazing boost to electronic publishing. As a result the information which is being generated at intense pace from all the directions worldwide for all the themes is now being published in form of electronic journals (e-journals). Anyone with access to a computer equipped with a modem and suitable software can produce and distribute an e-journal through a computer network, thus journal publishing is being democratized. Usually, e-journals are published as electronic equivalents of their print counterparts but recently there is an increase in number of scholarly journals which are being published in electronic form only. As a result, e-journals have emerged as vital components of information resources of a library and play an imperative role in the distribution of prime information.

E-journals are global information highways, so these are being added to library collections at exponential rates. Libraries are doing extensive work to make e-journals available to their users and keeping them abreast with latest developments in their field of interest. E-journals are accessible either free against print subscription or for a nominal charge along with the print subscription. Access to e-journals is generally provided either by the publisher or through their aggregators. E-journals have provided excellent opportunities to access scholarly information, which were previously beyond the reach of libraries due to geographical constraints. E-journals possess many added features for the facilitation of libraries and its user community. These offer concurrent access to the scholarly content for multiple users. So these are boon for a huge campus where there are hundreds of users with many departments. Other features of e-journals include full-text search, multimedia facilities and hypertext links. Text search is much easier and less cumbersome. E-journals also include multimedia and graphics to attract readers. Also the hypertext available in the e-journals will directly link to the areas of greatest interest and results in creative
reading. Maxymuk (2004) highlighted that advantages of electronic journals include no physical space required and accessibility from almost any workstation that can be connected remotely to the institution’s network. Thus e-journals can be accessed round the clock across geographical barriers, which make e-journals omnipresent. The most fortunate thing about e-journals is that both libraries and users can conquer the problems of missing issues and delay in receiving the issues. It can be clearly said that e-journals are truly a dream come true both for the librarians and users. Consequently libraries are now persuaded to subscribe to e-journals from a vast variety of publishers and providers.

**Online Journals**

Online journals are simply serial publications in which the end products are made available in digital format and whose contents may or may not be peer-reviewed. Basically Internet is used for the dissemination of the online journals. After a print-run of some 340 years, the scholarly journals have now assumed a parallel digital life. By the turn of the century, 75% of academic journals were offering online editions, and more than a 10000 peer reviewed journals exited in digital form (2/5). In February 2004, out of total number of 43,500 journal titles listed in Ulrich’s periodical directory, over 34,500 were online periodicals of all types.

“Electronic serials may be defined very broadly as journals, magazines, e-zines, webzines, newsletters, or types of electronic serial publication which are available over the Internet. Within this broad definition, the titles can be electronically accessed using different technologies such as the World Wide Web (WWW), gopher, ftp, telnet, email, or listserv.”

E-journals are those journals, which can be accessed electronically using different technologies such as the World Wide Web, gopher, ftp, telnet, list servers etc. There are two types of e-journals those issued free of charge over the Internet and those accessed based on payment of subscription. As the publications of e-journals are quick, they can convey recent /up-to-date information.
1.2. Definitions

There is no universally accepted definition of online journal. Some call it a “paperless journal,” some people say “virtual journal,” and some others say it is an “electronic journal.” Online journals are available through online hosts at high costs. They are not likely to be part of library collections. An online journal allows remote access. It can be used simultaneously by more than one user. It provides timely access. Online journals support different searching capabilities and saves physical storage. An online journal is a serial publication, often scholarly, that is made available in digital format and distributed over the Internet. Considering articles within each year, and averaging each year from 1990 to 2000, online articles were cited 4.5 times more often than offline articles. The experts in these fields gave the definition of online journals on the basis of production, distribution, etc.

E-journals have been defined in different ways by different authors. An early definition by McMillan (1991) described electronic journals as "any serials produced, published, and distributed via electronic networks such as Bitnet and the Internet." Ashcroft and Langdon (1999) stated that a journal, including indexing and abstracting services, provided by any electronic means, e.g. Internet, CD-ROM is called as e-journal. These journals are generally accessible electronically via web. Subsequently Smith (2003) gave a clear definition of e-journals as “any journal that is available online, including both electronic-only journals and journals that are available both electronically and in print”. E-journal, hence, is a term used to describe a periodical publication that is published in digital form to be displayed on a computer screen.

According to Ali’s Glossary of Library and Information Science, “An online journal is a publication, often scholarly, that is made accessible in a computerized format and distributed over the Internet.”

According to Oxford English Dictionary, a ‘journal’ is “any periodical publication containing news or dealing with matters of current interest”, and that the prefix e- means “exchange of information in an electronic format, to be displayed on a computer screen or a hand-held device”.
According to Net Lingo, the Internet Dictionary adds a narrower definition; "a frequent, chronological publication of personal thoughts and web links." From these definitions it is clear that an on-line journal is nothing but digitized journal articles provided to the user groups on the web or Internet. Numbers of web servers have been established to-day to host the journals in digital format, so that, the browsers can access according to the need from any part of the world and, at any time.

E-Journal is an electronic form that is the machine-readable form. E-Journals are available both in Internet and CD-ROM. An electronic journal is a publication issued at regular intervals and available electronically. There are different types of electronic journals:

1. Full text: These are e-journals where complete articles are available rather than just summaries or abstracts. Usually the whole of the journal is available online.

2. Electronic version of print: These journals are available both in print and electronic formats. Sometimes the electronic version may differ from the print journal. For example articles may appear electronically before they are printed or the electronic version may have supplementary material on it.

3. Electronic only: These journals are available only in electronic version. It should be noted that sometimes electronic journals allow you to access the full text of particular pages of the articles or sections of the journal, but not full pages of the articles.

4. Non-full text: These are e-journals where you will not be able to access the full text of the whole journal.

5. Online e-journals: These types of e-journals are available through online hosts.

6. CD-ROM e-journals: CD-ROM based e-journals are usually full texts of individual or collected journals on a variety of subjects. They are mostly electronic versions of existing printed journals.

7. Network e-journals: Network based e-journals are based on mailing software or client/server computer applications includes WWW and Gopher.

a) First Generation of e-journals is as ASCII text files with simple file structure and small file size.
b) Second generation of e-journals is either HTML based or they use the web to disseminate the specially formatted files.

Change is a rapid and expected phenomenon in the discipline of medicine. Over the years, new drugs, new therapies, and new procedures have been developed. Although the medical profession welcomes change, individual physicians face considerable challenges when a medical innovation is introduced. Medical libraries are providing different types of information sources and services to the faculty members as well as the students.

The quality of medical research depends largely upon the efficient interchange of information. It is therefore essential that medical literature should be easily and rapidly accessible to the medical practitioners, faculty members and research workers and, they in turn should be able to use it to full advantage. To the medical practitioner, it offers continuing education, providing him with the experiences and recommendations of professional colleagues, sometimes warning him with their failures, and always making it possible for him to keep abreast of recent progress.

The products of medical and health science education are to meet the societal needs for the better health care. A medical institution library is the primary requirement of a medical science educational institution. The importance of medical institution library has already been established. Now we are enjoying the benefits of information technology in many ways. As health science information is a part and parcel of our daily life, we are depending much upon the health science libraries. A medical institution library acts as an information resource centre to the teaching and research activities by organizing and disseminating knowledge through conventional and modern techniques.

1.3 Statement of the Problem

The research problem is conceived under the title “USE OF ONLINE JOURNALS BY THE FACULTY MEMBERS WORKING AT THE MEDICAL INSTITUTIONS IN BANGALORE CITY: A STUDY”.
1.4 Need and Importance of the Study

In recent times, teaching and research has become more technology and digital content oriented. Advanced computer and data transmission technologies have improved the ICT applications to a larger extent and to make them more user friendly. A large number of teachers and researchers show inclination towards computer based learning, with wider access to online resources.

Presently, most of the information is available in electronic form because of the exponential growth of information. Medical faculties are facing problems in recognizing these resources in their field of study. As the information in the field of medical sciences and allied areas change quickly and often, a good medical science institution needs to remain up-to-date. Medical faculties need up-to-date and current information for their daily academic work; hence, there is need to know the problems and prospects in accessing online journals.

More than anything else, of late, a vast amount of literature in the field of medical science is made available on the web. Medical professionals rely more upon online journals to know the current trends. The studies of Omotayo (2010) on access, use and attitudes of academics towards electronic journals: a case study of Obafemi Awolowo University, Ile-Ife. The findings show 22 (8.98%), 67 (37.35%), 102 (41.63%), 34 (13.88%) and 20 (8.16%) of the total population of 245 use electronic journals daily, weekly, monthly, bi-monthly and occasionally respectively. A majority use e-journals monthly, while 52% of total population in the study of Borrego, et al. (2007) stated that they use electronic journals exclusively or mainly.

Further, vital facts, research data, as well as, current information, including many journal articles are accessible on the web as open source and accessible free of cost. Day-by-day, the resources on the web are increasing. The academicians and researchers are left with no alternative than relying upon these on line resources to be up-to-date and also to discharge professional duties and responsibilities to the satisfaction of their customers and service groups of patients on one hand and, the students on the other. Therefore, the study on the use of on line journals helps the policy makers, administrators and academicians to take appropriate decisions in
giving due importance to information services and developing information infrastructure. This will also help in taking decisions while giving priorities in budget allocation.

1.5 Objectives of the Study

The main aim of the research is to analyze the use of online journals by faculty members working in medical institutions in Bangalore city. The objectives of the research are as follows:

1. To examine and understand for what purposes the faculties working in medical institutions rely upon online journals.

2. To analyze the extent of the use of online journals made available to the faculties in these medical institutions.

3. To know how far the online journals are made available/accessible to the faculties are need-based.

4. To determine which medical databases (covering journals) are really useful for faculty and to what extent.

5. To determine the ranking of journals based on the extent of use.

6. To know the extent of adequacy of internet facility available in the medical institutions.

7. To identify the constraints in providing access to online journals and further, to project the possible solutions to overcome those constraints in getting access to online journals.

8. To find out how for the journals are useful for faculty.

9. To determine the necessity of providing orientation and training to the faculties in order to access online journals easily and quickly.

1.6 Hypotheses of the Study

1. Quite a number of journals in the discipline of medicine are freely accessible on the web. Because of this trend, now-a-days, faculties working in the medical institutions in Bangalore rely upon online journals for their professional tasks.

2. Faculties rely upon online journals to know the current information and recent advances in their areas of interest. This is especially so while writing papers,
attending seminars, presentations/discussions in internal colloquium and similar academic activities.

3. The online journals that are accessible in these medical institutions on subscriptions do satisfy the needs of faculty to a limited extent. Many of the core journals or scholarly journals still remain unsubscribed.

4. The infrastructure facilities and skills for accessing online journals are inadequate and it is difficult for some of the faculty members to access/browse e-journals.

5. The orientation program and training program need to be conducted to the faculty to improve knowledge and skill in accessing online journals.

1.7 Scope and Limitations of the Study

This study is focused on the use of online journals by the faculty working in the medical institutions in Bangalore city. The main aspects covered are

- The medical journals which are available in full text and on open access platform.
- Study covers the subscription based full text on-line journals in medical and allied disciplines.
- The focus is on the use of online medical journals by the faculty members working in medical institutions in Bangalore. The category of faculty includes lecturers, Assistant professors, Associate Professors and Professors.
- Faculty members working in the 12 educational institutions in the discipline of medical sciences in Bangalore are considered for the study.
- The personnel working in medical institutions which come under the category of researchers, paramedical and technical staff, demonstrators and non-teaching staff are excluded from the study.

The present study is restricted to the medical institutions in Bangalore city. Medical science is very vast and multidisciplinary subject which covers the areas like General Medicine, OBG, Anesthesia, Pediatrics, Biochemistry, Physiology, Microbiology, Pharmacology, Community Medicine, Physiology and Forensic Medicine etc.
1.8 Methodology of Research

In the present study, the researcher has conducted a thorough literature search by browsing the CD-ROM database of Library and Information Science Abstracts (LISA) and online database such as Library and Information Science and Technology Abstracts (LISTA), EBSCO host, Emerald and other e-dissertations and e-theses resources, including Vidyanidhi, NDLTD, Shodh Ganga.

There are 12 medical institutions which are offering academic courses leading to the award of Bachelor’s Degree, Master Degree in the field of medicine and allied subjects. All the 12 academic institutions have been covered in the study.

For the purpose of data collection, a structured questionnaire-1 was designed to obtain data / information from the librarians of the medical institutions. The questionnaire was intended to cover the aspects like Journals subscribed, Browsing terminals, ISP and connectivity / bandwidth, working hours, technical assistance and maintenance. The questionnaires were distributed in the 12 medical institution librarians to obtain the data relating to infrastructure facilities available in these medical institution libraries. Further, the data thus obtained through the questionnaire was analysed to arrive at the valuable findings and conclusions.

The data and opinions pertaining to the use of online journals by the faculty members, working in medical institutions in Bangalore were collected through the questionnaire-2. A closed-end questionnaire projecting various alternative answers were administered in order to obtain data / opinion from the faculty members who were mainly involved in teaching by designation. Here, faculty members include teachers who are imparting knowledge or engaged in teaching program by designation. Altogether 1505 teachers have been working in the 12 medical institutions. Questionnaires were distributed to 1340 teachers and responses were obtained from them. The total number of responses obtained in the form of questionnaires were 1070 which account for 71.9% out of the entire population of faculty members. The faculty members include Professors, Associate Professors, Assistant Professors, and Lecturers working in the 12 medical institutions in Bangalore city.
The investigator has personally met several heads of the departments, Professors and Assistant Professors and interacted with them regarding the extent of the use of online journals and the usefulness of various online journals. The investigator has also observed the use pattern of online journals and the infrastructure facilities made available to the faculty members.

The data thus obtained were tabulated, analysed and interpreted to arrive at the findings. American Psychological Association (APA) style has been adopted to render references. The statistical methods such as ANOVA and CHI-square tests have been used to test the hypotheses. Graphs and charts have also been used to make the findings and explanations clear.

**1.9 Scheme of the Study**

1. Introduction
2. Review of Literature
3. Medical Institutions: A Profile
4. Infrastructure and Internet Facility in the Medical Institutions
5. Analysis and Interpretation of Data on Use of Online Journals
6. Summary of Findings, Recommendations and Conclusions
7. Bibliographical References

**Appendices**

A. Questionnaire - 1
B. Questionnaire – 2
C. Ranking of On-line Journals based on extent of use.