# Awareness and Utilization of Electronic Resources among Junior Research Fellows with Special Reference to Christian Medical College & Hospital, Vellore, Tamil Nadu

J. Tamil Vanan<sup>1</sup>, J. Manalan<sup>2</sup>, D. Joyson Soundrarajan<sup>3</sup> and T. Raja<sup>4</sup>

<sup>1</sup>Assistant Librarian, Centre for Stem Cell Research, Christian Medical College, Vellore
<sup>1</sup>Research Scholar, <sup>2</sup>College Librarian, <sup>1&2</sup>Bishop Heber College (Autonomous), Tiruchirappalli, Tamil Nadu, India
<sup>3</sup>Senior Librarian and Head, Christian Medical College & Hospital, Vellore, Tamil Nadu, India
<sup>4</sup>Librarian, St. Xavier's College of Education, Palayamkottai, Tamil Nadu, India
E-Mail: tamil339@gmail.com, jesudossmanalan@gmail.com, joyson59@gmail.com, rajaansondas@yahoo.co.in
(Received 17 December 2018; Revised 22 January 2019; Accepted 4 February 2019; Available online 10 February 2019)

Abstract -Electronic is the electronic depiction of information. This information is available in various forms like e-books, ejournal, e-learning tutors, etc. The study aimed at finding the awareness and utilization of e-resources by the junior research fellows Christian Medical College and Hospital, Vellore. A questionnaire was distributed to the end- users to collect the data. The distribution was done to the selected samples; collect the sound samples. The study aims to find the awareness about the availability of e-resources. The result as reveal what type of e-resources preferred, what searching engine was used most, problem faced during accessing the e-resources, ranking of the available e-resources and to find the percentage of received eresources from library services. The analysis also reveals few other data which should help to improve the library services. Keywords: End Users, E-Resources, Awareness, Researchers, and User Study

# I. INTRODUCTION

Use of Electronic Resources in the 21<sup>st</sup> century hascreated lots of changes inboth Library and Information Services as well as to the scholarly community. The use of information technology is the century's most significant development affecting scholarly communication. The scholarly communication has undergone incredible changes during this era. The new technologies offer a possible and speedy way to publish and to make use of the published information on the desktop. These are the key advantages that attract end-users. The latest development of information and communication technology (ICT) is transferring knowledge to the current information society. With the use of ICT, the transferring information can be done without any limitations like time and place(Talebian, 2014), in which the libraries are the witness for the great development in recent years in both collection and dissemination of information. Two main concepts emerge in scholarly community evaluation of Electronic Information Services (EIS), namely awareness and utilization. These two concepts attempt to analyze and evaluate the way a user interacts with an information system concerning two different related aspects. The first aspect focuses on the interaction between user and content, while the second concentrates on the usability and impact.(Delone, 2003)

Researchers find out that there is a significant number of initiatives assessing and monitoring the impact of ICT use in education.(Kang, 2011)The locality held scholarly information are served to the necessitates faster by using technology to strengthen the scholarly community. "The transition from print to the electronic medium, apart from resulting in a growth of electronic information, has provided users with new tools and applications for information seeking and retrieval."(Tsakonas, 2006)The traditional library interference has been substituted by the indispensable research tools called Electronic Information Services (EIS).

# **II. ELECTRONIC RESOURCES**

Modern technologies which are available in various forms like e-books, e-journals, digital libraries represent the Electronic Resources. The electronic resources is main source of information which delivers the collection of information in the form offull-text databases, e-journals, image collections, multimedia in the form of CD, tape, the internet, web technology, etc. In addition to this it also includes e-discussions, e-news, data archives, online email, chatting etc. Electronic information source has the broad range of products, and the primary sources are from electronic periodicals. Thought the electronic resources are effective in productivity it is more complex to manage than physical resources, with electronic resource unit members being required to learn many new library systems, the functions related to these resources often extended outside the boundaries of technical services. In many libraries, electronic resource units' responsibilities have gradually grown to encompass parts of the areas of collection development, systems and access services.(Anne C. Elguindi, 2012)

# III. ABOUT CHRISTIAN MEDICAL COLLEGE & HOSPITAL, VELLORE

Christian Medical College, Vellore (CMC&-Vellore), was founded by Dr. Ida Sophia Scudder in 1900. It was established and maintained by the Christian Medical College Vellore Association. The Christian Medical College is dedicated to run, manage and provide health care in the spirit of Christ. The CMC Vellore offers UG, PG coursesin multiple discipline and it also offers Doctoral courses focusing on the areas of Medicine, Surger. Admission in CMC Vellore is carried through a entrance examination if cleared will be followed by interview. The Christian Medical College, Vellore town campus was started in 1924 as a 267 bed hospital. Dr Scudder started training female for the Licentiate Diploma (LMP) in 1918, only in the 1947 the first batch of male students were admitted.

Community Health department of CMC was recognized in the year1957. CMC vellore runs the community programs like Community Health And Development (CHAD), Rural Unit for Health and Social Affairs (RUHSA), College of Nursing Community Health (CONCH) and in 2014 Low Cost Effective Care Unit (LCECU) as opened the Shalom Clinic for middle-income patients preferably for vellore people.(CMC, 2018). The Week magazine ranked the Christian Medical College, Vellore second among medical colleges in India in year 2017 meanwhile India Today magazine ranked third.(Wikipedia, 2018)

### **IV. REVIEW OF LITERATURE**

In effect, all the studies reviewed below are implemented on the assumption that uptake of electronic resources are highly desirable in that it leads to increased productivity of work, learning, teaching, and research. (Dulle, 2016) carried out a study which is designed to assess the awareness and usage of a discovery tool known as LibHub.

The study involved respondents who were randomly selected from the Sokoine University Agriculture in Tanzania. Despite 96.9% of the respondents had found to be aware of the available online information resources, 93.80% of them used such information resources. An insignificant 8.1% of the respondents viewed the ability to save search results and reliability and focused on search results as the other advantages of using LibHub.

(Tsakonas, 2006) conducted a survey at Annamalai University in which the students, researchers, and faculties of arts participated. The study found that most of the users are conscious about the accessibility of e-resources. The outcome of the survey also showed that 47.78 % respondents wish to access electronic version only, but 32.78% users want to read the printed journals, on the other hand,19.44% respondents want to use both electronic and printed version.

(Gowda, 2009) carried out a worldwide academic activities and the research activities are being supported by the electronic resources document delivery services. The following reviews also show that a number of relevant studies have been carried out on the use of e- resources by professors, lecturers, research scholars, students all over the world This is well confirmed in the case of a survey undertaken at the University of Lagos.

# V. SIGNIFICANCE OF THE STUDY

The information explosion in the present era the publications are becoming Web-disturbed. Most of the libraries have altered the contemporary attitude towards functions and services. The environment is rapidly evolving to an electronic depended. The authors decided to conduct a study for measuring the awareness and utilization of eresources by the end-users of Christian Medical College Libraries.

# VI. OBJECTIVES OF THE STUDY

The main purpose of this study is to investigate the following:

- 1. To find out the awareness and utilization about available e-resources.
- 2. To find out the frequency and purpose of library visit.
- 3. To find out the preferred searching engine and factors that influences the use of searching engine incollecting the e-resources.
- 4. To find purpose of using e-resources.
- 5. To find the preferred e-resources and the location used to read.
- 6. To find out the percentage of e-resources available from the library.
- 7. To find out the methods used to retrieve the required e-resources.
- 8. To analyze the strength and impact of library e-resources on the user community.

# VII. METHODOLOGY

A structured questionnaire was prepared using Google form and the link to the questionnaire was circulated to collect the data from the end-users of Christian Medical College Libraries. The questionnaire contains several questions about the awareness and utilization of e-resources. For this purpose, a total of 45 questionnaires were distributed amongjunior research fellows of the Christian Medical College. Out of 45 questionnaires distributed, due to very short duration given to the respondents only 84.4% responded to the questionnaire. The valid data were collected and have been analyzed, tabulated, interpreted and presented in this paper.

# VIII. SCOPE AND LIMITATION

The current study covered the junior research fellows from different departments of the Christian Medical College who have been facilitated by the library services. As short duration given 15.6% of respondents were unable to respond to the questionnaire due to some personal reasons.

# **IX. DATA ANALYSIS**

Analysis of data is the primary and essential step in the research process. This process is a link between the collected raw data and the results, leading to significant conclusions. This process of analysis has to be resultoriented. J. Tamil Vanan, J. Manalan, D. Joyson Soundrarajan and T. Raja

#### 1. Population Study

*A. Gender:* Personal details part of the questionnaire provides information regarding the gender. The study shows that 53 % of populations of the study were males and only 47 % were females (Fig.1).

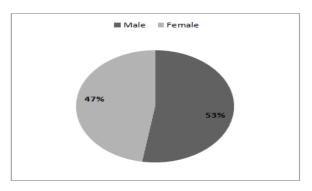


Fig. 1 Gender wise distribution of respondents

*B. Age Group:* The population studied various from different age groups 21 and above 35. The 39% of the respondents were from the age group of 21-25 which is the highest when compared with other groups (Table I & Fig. 2) and the age group above is the least in the study of only 3%.

Age Group	No. of Respondents	Percentage
21-25	15	39%
26-30	14	37%
31-35	8	21%
Above 35	1	03%
Total	38	100%

TABLE I AGE WISE DISTRIBUTION OF RESPONDENTS

#### 2. Library Visit and Purpose

In response to the question frequent of visit and purpose of the visit to the library. Respondents answered that 18.42% of respondents visits every day, 26.31% of them visits once in 2 days, 7.89% of users visit once in 3 days, 44.73% of users visit once in week and only 2.63% said that they never visited library (Fig. 2). And regarding the question, purpose of the visit a highest of all 41% of the user visit for research purpose and in less 8% are visiting the library to access the internet (Fig.3).

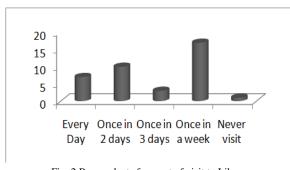
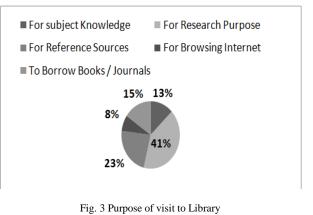


Fig. 2 Respondents frequent of visit to Library



#### 3. Use of Internet to Access E-Resources

In response to the question frequency of browsing internet to E-resources. The respondents have responded in different ways (Fig.4). Majority of the respondents use internet every day (87%) to access the E-resources and rest of respondents (13%) browse the internet rarely.

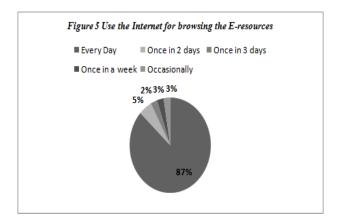


Fig. 4 Use the Internet for browsing the E-resources

4. Searching Engine Used and Factors That Influence the Searching Engine

From fig.5, it is clear that most of the respondents (74%) use only Google searching engine. 10% of respondent's use Pubmed, 16% of the user prefer both Google and Pubmed.

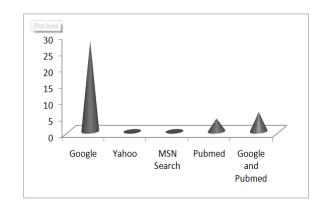


Fig. 5 Most preferred searching engine

Fig.6 shows that 73.68% feels that searching engine influences to a full extent in findings because it is easy to browse the internet recourses. 68.42 % says it influences because of the user friendly features. 61% feels that searching engine provides more relevant information. 58% feels that searching engine influences to a full extent because they know the searching strategy. Only 29% says, searching engine influences to some extent which was recommended by library staffs.

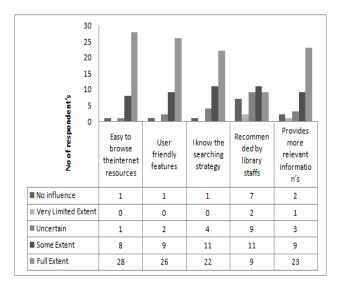


Fig. 6 Factors that influence the use of search engines

5. *Preference Level of Using E-Resources:* The following questions were put to users to find out the preferred level of using e-resources.

A. Preferred E-Resources: The result reveals that 73.6% of the respondents prefers on the resources which is available on internet, whereas 65.7% of the respondents prefer to use E-journals, RCD-ROM/DVD's was the less (7.8%) preferred e-resources (Fig.7).

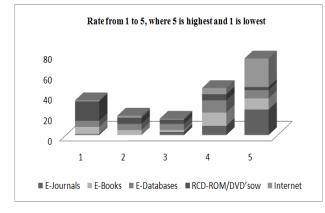


Fig. 7 Preferred E-resources

*B. Preferred Location:* It is observed from the analysis that 39.47% of the respondents preferred to use the E-resources at the library, 34.21% prefers to use in the others places of CMC, Vellore and 13.15% prefers any location (Table II).

TABLE II PREFERRED LOCATION TO ACCESS THE E-RESOURCES

Location	No. of Respondents	Percentage
At library	15	39.47%
Other place at CMC	13	34.21%
At home	2	5.26%
At other place	3	7.91%
All the above	5	13.15%
Total	38	100%

#### 6. Accessing the E-Resources and Problem Faced

About 65.78% of respondents browse the E-resources directly using the searching engine. Most interestingly none of the respondent's access using the personal subscription and 23.68% of the respondents requests the librarian to provide the required E-resources.

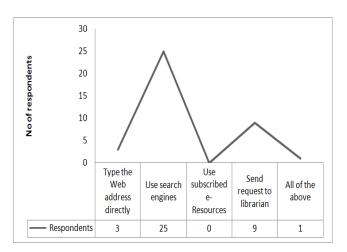


Fig. 8 Browsing required information from the e-Resources section

Respondents were questioned regarding the problem faced by them during the access of e-resources, the results shows that due to slow access speed (26%),difficulty in finding relevant information (26%), overload of information on the Internet (26%), privacy problem (19%) and only 3% if them say that it takes too long to view/download pages (Fig.9).

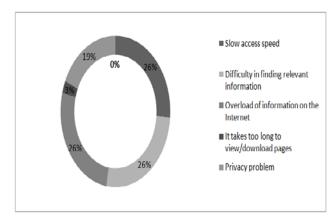


Fig. 9 Problems encountered mostly while using the e-Resources

#### 7. Article Request Service

Respondents were asked to indicate what percentage of their required article has been served by the library. It is observed from the analysis that 26.31 % of the respondents are receiving all the necessary articles, 42.1% respondents about 75% of their requirement, 23.68% of the respondents 50% of their required article, 5.26% of the respondents 30% and only 2.63% of them less than 30% (Fig.10).

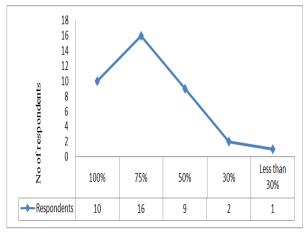


Fig. 10 Percentage of e-resources provided by library

#### 8. Ranking of E-Resources at CMC, Vellore

Christian Medical College and Hospital libraries have served the community for the several years by proving them with the required e-Journals and e-books. Respondents were asked to rank and ecaluate the e-resources available at CMC and the results shows that 34% ranked the available eresources are excellent, 37% ranked very good, 13% ranked fair, 11% ranked good and only 5% ranked that the eresources need more improvement (Fig.11).

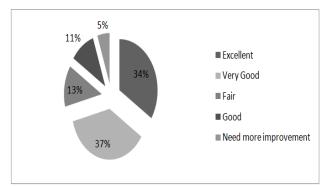


Fig. 11 Ranking and evaluate the e-resources available at CMC libraries

#### X. RECOMMENDATIONS

This study showed that the uses of e-resources are prevalent among the research students from different departments of the Christian Medical College, Vellore. It also showed that majority of research scholars are dependent on e-resources to get preferred and significant information. However, it was discovered that functional uses of e-resources are not up to the mark in comparison to funds spent in acquiring these resources. To improve the services for the efficient use of electronic resources suitable measures should be taken to overcome the issues, such as increasing the speed of internet, the number of terminals and printers. The library management, therefore, needs to conduct user-study programs to know more about the electronic resource needs of the users.

#### **XI. CONCLUSION**

The communication of scholarly information has now a day has emerged as the most dominant medium for retrieval and storage of information. Electronic and web resources are usedto retrieve required information and end-users are going in search of different methods day by day. The speedy development in the growth of information, communication technologies, mainly internet electronic resources has changed the traditional methods of doing research, retrieving the required information and storing them for future use. The analysis showed that the awareness and utilization of the electronic resources had created a significant impact upon the users of Christian Medical College, Vellore. The Library facility at CMC, Vellore has helped its user with the needs. Information has been transferred in a wide range of means and forms in various kinds of electronic resources. The Department of library services, Christian Medical College, Vellore helping the user to make use of all the electronic resources in a reasonable way, but the frequent usage of e-resources by the users has been found to be at the beginning the level. Future study will be carried out to give orientation in detail about the services available at the libraries of Christian Medical College and Hospital, Vellore.

#### REFERENCES

- [1] Anne C. Elguindi, Kari Schmidt.(2012). Chapter 3 Electronic resource management systems: implementation and transformation. (*1st ed.*). *UK: Woodhead Publishing Limited*.
- [2] CMC, Director. (2018). Christian Medical College Vellore. Retrieved 11 October 2018, from http://www.cmch-vellore.edu/
- [3] CMC&-Vellore. (2018). Christian Medical College Vellore. Retrieved 11 October, 2018
- [4] Delone, W.H., & McLean, E.R (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal* of Management Information Systems, 19(4), 9-30.
- [5] Dulle, F.W., & Alphonce, A (2016). Addressing online information resources' access challenges: potentials of resource discovery tools' *application. ALIS*, 63(4).
- [6] Gowda, V., Shivalingaiah, D (2009). The attitude of research scholars towards usage of electronic information resources: a survey of university *libraries in Karnataka*. ALIS 56(3).
- [7] Kang, Myunghee. (2011). The impact of ICT use on new millennium learners' educational performance. *Interactive Technology and Smart Education*, 18(1), 18-27.
- [8] Talebian, S., Mohammadi, H.M., Rezvanfar, A. (2014). Information and Communication Technology (ICT) in Higher Education: Advantages, Disadvantages, Conveniences, and Limitations of Applying E-learning to Agricultural Students in Iran. *Proceedia -Social and Behavioral Sciences*, 152, 300-305.
- [9] Tsakonas, G., Papatheodorou, C. (2006). Analysing and evaluating usefulness and usability in electronic information services. *Journal of Information Science*, 32(5), 400-419.
- [10] Wikipedia. (2018). Christian Medical College & Hospital, Vellore. Retrieved 11th October from https://en.wikipedia.org/wiki /ChristianMedicalCollege%26Hospital,Vellore.