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Usage of Electronics Information Resources by Selected Government Medical College Library Faculties and Post Graduate Students Affiliated To Rajiv Gandhi University Health Science Karnataka : A Case Study

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ABSTRACT

The paper focuses on the use of electronic information resources by the faculty members and P.G. Students of selected medical college libraries in Hyderabad-Karnataka region. The investigator has distributed questionnaires to the faculty members (90) and P.G. Students (90) total 180, out of which faculty members (75), P.G students (75) total 150 (83.33%) questionnaires were received back. The findings of the study shows that majority (85%) of the respondents purpose of accessing internet for data communication (sending and receiving E-Mail, Chat, Net Phone) followed by 51% of them access internet for purpose retrieve medical case history. The result also indicates that majority (88%) of the respondents use electronic information resources for supporting teaching activities and 61% for journal club purpose. Some of the considerable numbers of respondents (85%) are aware of electronic information resources by personal communication with friends, subject experts and resource persons.

Keywords : Internet Electronic Information Resources, Medical College libraries, Hyderabad- Karnataka, India, HELINET

I. INTRODUCTION

Electronic information resources (EIRs) are becoming top worldwide, and these are very much evident right from the day of existence of libraries, that libraries are providing abundant and varied information on deferent areas and deferent subject of fields to one and all the users who visit it. Health practitioners need information searching skills to deal with the growing volume of medical science (Sharanabasappa 2019). Therefore, the ability to quickly access, follow, coordinate, analyze and store information is essential for routine decision making related to patient care, education and research. In addition to the latest changes in the health care systems developed countries have placed new demands on health care services. Delivery of healthcare has become interwoven with the adoption of Computer and EIRs for updating their academic and research knowledge.

The study is confined to three old private medical college libraries in Hyderabad-Karnataka namely 1. Mahadevappa Rampure Medical College, Gulbarga 2.

Khaja Bandanawaz Institute of Medical Sciences, Gulbarga 3. Navodaya Medical College, Raichur.

About Hyderabad-Karnataka

Details of Hyderabad-Karnataka region, which is the region selected for the present study is as follows. H.K. (Hyderabad-Karnataka) region is the name given to the area which was the part of erstwhile Hyderabad Province before the formation of new state. When the new sate of Mysore (Presently known as Karnataka) was formed in 1956 (Wikipedia, 2019), Kannada speaking areas of Hyderabad Province were added to the new state. These areas came to be known as H.K Region later on. At present, the H.K region includes six districts namely, Bidar, Kalaburagi, Yadagir, Raichur, Koppal and Bellary (Govt. of Karnataka, 2019).

II. PROFILE OF THE SELECTED MEDICAL COLLEGES

Mahadevappa Rampure Medical College (MRMC)

M.R. Medical College was decided to establish by the Government of Karnataka at Bellary instead of Gulabarga, Hyderabad-Karnataka Education Society under the leadership of founder of Sri Mahadevappa Rampure started Medical College in private sector at 1963 (HKES, 2019). At the time Govt. of Karnataka Chief Minister Sri. S. Nijalingappa, and Sri. Veerendra Patil and Dr. D.C. Pavate helped in establishing the M.R Medical College. The college was affiliated to the Gulbraga University till the year 1996 and after that it got affiliated to Rajiv Gandhi University of Health Sciences, Bangalore. Its Library and information center has 4,800 sq ft. of floor area, it is located at the 3rd floor, with the provision for textbooks section, reference section, stock area, back volume area, periodical section, dissertation section, audio/video section, reprographic section, computer work station with internet with Wi-Fi facility and access to electronic resources.

Khaja Banadanawaz Institute of Medical Sciences (KBNIMS)

The Khaja Education Society was established in the year of 1958, by its founder Janab Syed Shah Muhammad Al Hussaini. Today Khaja Education Society has more than 15 institutions running under its umbrella. In that KBNIMS is a Minority Institution which was started in 2000, permission given by Govt. of India, approved by Medical Council of India (KBNIMS, 2019). The KBNIMS is affiliated to Rajiv Gandhi University of Health Sciences, Bangalore. KBNIMS Library and information center have separate independent library building, providing all services, facilities, fully campus Wi-Fi facility and easy access to electronic information resources.

Navodaya Medical College (NMC)

Navodaya Medical College was started as a first private sector medical college in Raichur, The founder is S.R Reddy, the college started with only the Navodaya Hospital & diagnostic center in 1996. Later in 2001 with setting up of NMC it became the full-fledged independent Medical College, affiliated to Rajiv Gandhi University of Health Sciences (NAVODAYA 2019). NMC Library and information center is well established, Library building is strikingly an architectural beauty, with its massive structures and aesthetic view leaves every one spell bound. The library area is around 4200 Sq ft. of floor area spread over in two floors with provision of different sections, digital library, conference room and NMC has full Wi-Fi facility for the access of the e- resources.

III. REVIEW OF LITERATURE

Jotwani (2014) studied the trends in acquisition of e-Resources vis-a-vis their print counterparts, identifies the e-Resources being subscribed by seven Indian Institutes of Technology (IITs) libraries located in India, and analyzed the usage of these resources during 2004-11. There is a clear shift in the

collection development policies of these libraries where e-Resources have become a vital part of their core collections. E- resources in all IITs are being heavily used as the number of downloads have increased from 3233818 to 7617691 articles reflecting a growth of 135% over a period of 8 years.

Issac and others (2015) conducted analytical study on use of Blogs among Library and Information Science (LIS) professionals in University of Calicut. A blog is an Internet or web service that helps to give awareness about the information of any topic of study of any interest. Blog is a website usually maintained by an individual with regular entries of commentary, description of event or other materials. The main objective of study are assessing the extent of use of blogs among the LIS professionals. The study revealed that the more than half (51.11%) of the professionals' purpose of blogging is to share information or insight but, few use it to enhance their professional development. A majority (73.33%) of library professionals are getting information regarding their profession through blogging. A majority (62.2%) of library professionals agree that library blog is a good sphere and a good medium for forming new working relationships with library patrons and users.

Karkun and Kumbar (2015) carried out a survey of faculty members and research scholars on use and user perception of e-Journals and databases in Universities of Karnataka. The main objectives of the study are to find out the source of awareness of e-Journals and databases available at the university library, to know the availability and usage of e-Journals and databases in university libraries of Karnataka and to know the purpose and frequency of use of e-Journals and databases by the faculty and research scholars. The study covers faculty and research scholars of six Universities in Karnataka namely, University of Mysore, Karnatak University, Bangalore University, Gulbarga University, Mangalore University, and Kuvempu University, Shivamoga. The questionnaire method was used for the study to collect the necessary primary data, keeping in view the objectives of the study. Findings and Suggestions are: 994 (96.88%) members of faculty and research scholars opine as they are aware about e-journals v and databases made available via university library. 557 (56.04%) members of faculty and research scholars become aware of e-journals and databases while browsing Internet and 535 (53.82%) become aware of e-Journals and databases by colleagues. The speed of the Internet should be increased to speed up information search and retrieval v process. The web designers/ publishers/ distributors should provide online help menu in the search page for better utilization of their information products like e- Journals and databases.

Dunn, Marshall, Wells & Backus (2017) has discussed in their survey on 'examining the role of MEDLINE as a patient care information resource: an analysis of data from the Value of Libraries study'. The objective of the study was analyzed data from a study on the value of libraries to understand the specific role that the MEDLINE database plays in relation to other information resources that are available to health (medical) care providers and its role in positively impacting patient care. The methodology of study on the use of health (medical) information resources for patient care obtained 16,122 respondents from health care providers from 56 hospitals about how providers make decisions affecting patient care and the role of information resources in that process. Users indicated resources used in answering a specific clinical question from a list of Nineteen possible resources, including MEDLINE. The study data were examined using descriptive statistics and regression analysis to determine the number of information resources used and how they was used in combination with one another. Has discussed in their survey on 'examining the role of MEDLINE as a patient care information resource: an analysis of data from the Value of Libraries study'.

Kumar and Naik (2015) in this article 'Usage of Wi-Fi Service among Users of Bangalore Medical College and Research Institute (BMCRI) Library, Bangalore' by 47 students of the BMCRI. Survey method was used for the study. It was found that 68.08% students visit the library for reading textbooks. 87.23% students were aware about the Xerox service, while 65.95% students use the internet for educational purpose.51.06% students face the problem while using the OPAC and 61.7% ask for help to the Librarian in using the library.25.53% students rated reading area as very well. Students need more proper orientation in the use of library resources.

IV. OBJECTIVE

The main objective of this study is to investigate the use of electronic information resources by faculty members and PG students of selected Medical College Libraries in Hyderabad-Karnataka region. The specific objectives are:

- To find out the purpose of accessing the internet and electronic information resources among faculty members and PG students of selected Medical College Libraries in Hyderabad-Karnataka region.
- To know the level of awareness of electronic information resources among faculty members and PG students of selected Medical College Libraries in Hyderabad-Karnataka region.
- To find out the usage of HELINET Consortia by faculty members and PG students of selected Medical College Libraries in Hyderabad-Karnataka region.
- To know the frequently used search engines by faculty members and PG students of selected Medical College Libraries in Hyderabad-Karnataka regions.
- To find out preferred format for downloading articles from the e-services among faculty members and PG students of selected Medical College Libraries in Hyderabad-Karnataka regions.
- To access level of satisfaction with electronic information resources by faculty members and PG students of selected Medical College Libraries in Hyderabad-Karnataka regions.

V. METHODOLOGY

Keeping in view the objectives of this study, the survey method is carried out to determine and analyze the present study. The population consists of faculty members and P.G. Students. The study is confined to three old private medical college libraries in Hyderabad-Karnataka. For collecting the data, structured questionnaire comprised open and closed ended questions of the study. A total of 180 questionnaires were randomly distributed to selected medical college library users and 150 duly filled in questionnaires were received, thus, resulting into a response rate of 83.33%. The method has been analyzed and interpreted and presented using simple MS Excel sheet and generated tables.

VI. DATA ANALYSIS AND DISCUSSIONS

Table-1: Distribution of Questionnaire for Academic Status (N=150)

Respondents	Respondents	Percentage
Faculty	75	50%
P.G. Students	75	50%
Total	150	100%

Figure-1 Distribution of Questionnaire for Academic Status

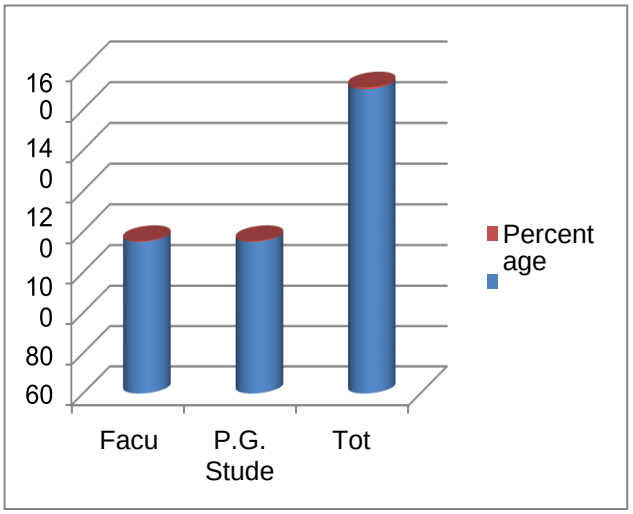

Table 1 Shows the distribution of respondents in the study. 50% percent of the respondents are Faculty members. Followed by 50% of the respondents are the P.G Students. It could be seen clearly from the above discussion.

Table-2: Purpose of Accessing the Internet

Sr.	Purpose	Respondents	Percentage
1	For data communication (sending and receiving E-Mail, Chat, Net Phone) etc.	128	85%
2	Search for academic medical information.	101	67%
3	For reading/writing research papers, research proposals and project work.	92	61%
4	For accessing E-Resources.	87	58%
5	For using online data bases e.g. PubMed.	84	56%
6	For accessing audio visual materials.	70	47%
7	For using course assignment.	52	34%
8	Medical case history	77	51%

Figure-2 Purpose of Accessing the Internet

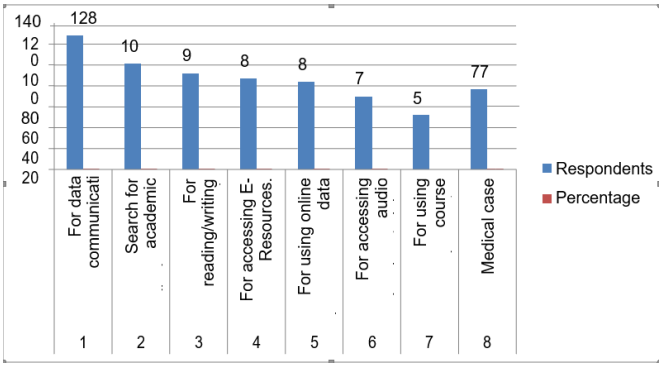

Table 2 reveals that majority of 85% of the respondents are use the internet for data communication followed by search for academic medical information 67%, for accessing e-Resources 58%, for reading and writing research papers, research proposals and project work 61% and for Medical case history 51%. Very less number of respondents 34% use internet for using course assignment. Therefore, it is clear that majority of the respondents use internet for data communication.

Table-3: Use of Electronic Information Resources

Sr.	Purpose	Respondents	Percentage
1	Supporting teaching activities	124	83%
2	Clinical practice	117	78%
3	Journal club	92	61%
4	Preparing for lecture	84	56%
5	Writing paper	80	53%
6	Undertaking research	105	70%
7	Carry out projects	88	59%

It is evident from table 3 that 83% of the users use electronic information resources for supporting teaching activities, 78% percent to clinical practice, 70% percent for undertaking research, 61% respondents for journal club and 53% percent of them use electronic information resources for writing their paper.

Table-4: Awareness of Electronic Information Resources.

Sr.	Awareness Factor	Respondents	Percentage
1	By personal communication with friends, subject experts and resource persons	127	85%
2	Through the librarian	83	55%
3	Announcements of journals	67	45%
4	E-mail alerts form publishers/distributors etc.	61	41%
5	Library web page	67	45%
6	Friends/Teachers	98	65%
7	Search engines	99	66%

Table 4 reveals that majority 85% respondents are aware of electronic information service through personal communication with their friends, subject exports and resource persons, followed by 66% by search engines, 65% got awareness by friends/teachers and 41% by E-mail alerts form publishers/distributors etc.

Table-5: Level of awareness of Electronics Information Resources.

Sl. No	Electronic Information Resources	Not at all aware	Very little aware	To somewhat extent aware	Much aware	Very much aware
1	E-journals	2 (1%)	27 (18%)	72 (48%)	42 (28%)	7 (7%)
2	E-books	-	24 (16%)	79 (53%)	37 (25%)	10 (7%)
3	Databases	13 (9%)	17 (11%)	80 (53%)	35 (23%)	5 (3%)
4	PubMed	10 (7%)	19 (13%)	78 (52%)	35 (23%)	8 (5%)
5	Med Scope	16 (11%)	19 (13%)	68 (45%)	40 (27%)	7 (5%)
6	MEDLINE	11 (7%)	38 (25%)	61 (41%)	33 (22%)	7 (5%)
7	Science Direct	21 (14%)	37 (25%)	54 (36%)	28 (19%)	10 (7%)
8	AccessMedicine	17 (11%)	58 (39%)	38 (25%)	30 (20%)	7 (5%)
9	ProQuest	12 (8%)	56 (37%)	33 (22%)	35 (23%)	14 (9%)
10	Ovid	14 (9%)	56 (37%)	50 (33%)	15 (10%)	15 (10%)
11	Clinical Key	13 (9%)	42 (28%)	45 (30%)	33 (22%)	17 (11%)
12	Wiley online library	17 (11%)	26 (17%)	84 (56%)	15 (10%)	8 (5%)
13	Oxford University Press	26 (17%)	24 (16%)	81 (54%)	11 (7%)	8 (5%)
14	Springer	28 (19%)	42 (28%)	49 (33%)	20 (13%)	11 (7%)
15	Anatomy.Tv	36 (24%)	53 (35%)	38 (25%)	21 (14%)	2 (1%)
16	EBSCO	36 (24%)	52 (35%)	27 (18%)	32 (21%)	3 (2%)
17	Uptodate	37 (25%)	51 (34%)	46 (31%)	14 (10%)	2 (1%)
18	McGraw-Hill	24 (16%)	36 (24%)	73 (49%)	12 (8%)	5 (3%)
19	BMJ	30 (20%)	28 (19%)	72 (48%)	19 (13%)	1 (1%)
20	Open access free resources (Biomed Central, MedIND, free medical journals)	23 (15%)	31 (21%)	71 (47%)	23 (15%)	2 (1%)

Data presented in the above table 5 indicate the level of awareness of electronic information resources. The majority of the respondents 48% are to somewhat extent aware of E-journals, 7% are very much aware of E-journals, 53% opinion to somewhat extent aware of databases, 9% are not at all aware of databases. 52% respondents are somewhat extent aware of PubMed, 7% are not at all aware of PubMed, 22% much aware of clinical key and 11% respondents are very much aware of clinical key, 35% opined that they are very little aware Anatomy.Tv and only 1% are very much aware of Anatomy.Tv, 49% of respondents are to somewhat extent aware of McGraw-Hill, 3% are very much aware of McGraw-Hill.

Table-6: Usage of HELINET Consortia.

Sl. No.	HELINET Database	Use not at all	Very little use	To somewhat extent use	Much use	Very much use
1	Annual Reviews	27(18%)	21(14%)	59(39%)	36(24%)	7(5%)
2	Clinical key	35(23%)	18(12%)	43(29%)	49(33%)	3(2%)
3	Blackwell	38(25%)	26(17%)	51(34%)	32(21%)	3(2%)
4	MD Consult	38(25%)	20(13%)	30(20%)	57(38%)	5(3%)
5	OVID	33(22%)	24(16%)	33(22%)	58(39%)	2(1%)
6	Springer	35(23%)	37(25%)	30(20%)	46(31%)	2(1%)
7	Taylore & Francis	35(23%)	34(23%)	37(25%)	42(29%)	2(1%)
8	Theme Verlog	48(32%)	28(19%)	44(29%)	29(19%0	1(1%)
9	J-Gate	34(23%)	23(15%)	52(35%)	40(27%)	1(1%)
10	Bentham	40(27%)	31(21%)	47(31%)	31(21%)	1(1%)

Table 6 indicates that HELINET Consortia is used 39% to somewhat extent for annual reviews, 5% very much use for annual reviews, 18% use not at all for annual reviews, 33% Much use for clinical key, 2% very much use for clinical key, 39% much use for OVID, only 1% respondents much use for OVID, 31% much use for Springer, 23% use not at all for Springer, 35% respondents to somewhat extent use for J-Gate, 1% very much use J-Gate and 31% to somewhat extent use for Bentham, 27% use not at all Bentham.

Hence, from the above table it is clearly shown that in HELNET consortia database is useful overall for somewhat extent only.

Table-7: Searching Techniques of Electronic Information Resources

Sr	Search of E-Resources	Respondents	Percentage
1	Directly typing the URL Addresses	98	65%
2	Using the search engines	114	76%
3	Website links	78	52%
4	OPAC	51	34%
5	Boolean search	54	36%
6	Using the author/title name	88	59%

Table 7 shows that 76% of the respondents are using the search engines to search electronic information resources, followed by 65% directly typing the URL addresses, 59% using the author/title name, and 52% website links and 34% of respondents searching through OPAC.

Table-8: Frequently used Search Engines

Sr	Search Engines	Respondents	Percentage
1	Google	150	100%
2	MSN	26	17%
3	HotBot	-	-
4	Magellan	-	-
5	WebCrawler	2	1%
6	Alta vista	53	35%
7	Open Text	10	7%
8	Clinical App.	29	19%
9	WebMD	30	20%

Table 8 explains that 100% respondents use search engine Google, followed by 35% Alta Vista, 20% WebMD, 19% respondents use Clinical App and only 1% use WebCrawler. Hence, it is clear that 100% of users search with Google search engine.

Table-9: Format for Downloading Articles.

Sr	Formats	Respondents	Percentage
1	PDF	142	95 %
2	HTML	13	10%
3	MS-Word	43	29%
4	PPT	25	17%

Table 9 shows the format for downloading the article from the electronic information services. Majority of respondents (95%) use PDF, 29% MS-Word, 17% respondents use PPT and very less respondents (10%) use HTML. Therefore, majority of users use PDF format instead of other formats.

Table-10: Users Satisfaction with Electronic Information Services.

Sl. No.	Electronic Information Services	Highly Satisfied	Satisfied	Moderately Satisfied	Dissatisfied	Highly Dissatisfied
1	Internet search service	10(7%)	57(38%)	53(35%)	20(14%)	10(7%)
2	Email alert service	3(2%)	35(23%)	53(35%)	37(25%)	22(15%)
3	E-Document delivery service	4(3%)	41(27%)	55(37%)	26(17%)	24(16%)
4	Clinical information service	6(4%)	38(25%)	49(33%)	33(22%)	24(16%)
5	Online journals service	8(5%)	45(30%)	35(23%)	39(26%)	23(15%)
6	Online database search	14(9%)	30(20%)	44(29%)	37(25%)	25(16%)
7	SDI (Selective dissemination of information)	5(4%)	29(19%)	46(31%)	46(31%)	24(16%)
8	CAS (current Awareness services)	5(4%)	44(29%)	33(22%)	46(31%)	22(15%)

Table 10 shows that majority of the respondent's i.e. 38% are satisfied with the internet search service, followed by 35% are moderately satisfied with e-mail alert service and 15% are highly dissatisfied. With regard to online journal services 30% of them are satisfied, 5% are highly satisfied with online journals services. With regard to SDI services 19% are satisfied and 16% of them are highly dissatisfied. 22% responded that they are moderately satisfied with the current awareness services and 15% are highly dissatisfied.

VII. FINDINGS

Most of the medical students and faculties use internet for the purpose of data communication i.e. 85%.

Majority 83% of them use electronic information resources for supporting teaching activities, 78% for clinical practice and 70% for undertaking research.

The majority (85%) of respondents were aware of electronic information services through personal communication with friends, subject experts and resource persons, 66% from search engines, 65% are aware by friends/teachers and 41% by e-mail alerts form publishers/distributors etc. However 48% have respondents are, to somewhat extent aware of E-journals, 53% opinion is that they are to somewhat extent aware of database, 52% respondents are somewhat extent aware of PubMed, in the HELINET consortia 39% of them use for annual reviews to somewhat extent, 33% much use for Clinical key and 31% to somewhat extent use for Bentham.

The majority of users indicated that 76% respondents are using the search engines to search electronic information resources, 65% by directly typing the URL address, 34% respondents through OPAC. Majority i.e. 100% of respondents used search engines Google, 35% used Alta Vista. Most of the respondents i.e. 95% download the article from the electronic information resources through PDF format.

Majority i.e. 38% are satisfied with the internet search services, 35% are moderately satisfied with E-mail alert service and 22% respondents are moderately satisfied with the current awareness services.

VIII. SUGGESTIONS

In the data analysis result, faculties were using internet for data communication, concerned authorities should give orientation for faculty about usage of internet for other purpose.

Majority of faculty were using EIRs for their clinical practice. But libraries should give advices for them to use EIRs for other purpose.

Majority of respondents were not completely using electronic information services (EISs). Hence, concerned authorities should take appropriate action for 100% usage of EISs.

From the table search engines, majority of users are depending on Google for search. Hence, librarian and other authorities should make them to change or to use others search engines.

IX. CONCLUSION

The present study concluded that emerging technologies have dynamically changed the way information is gathered, organized, accessed, stored and consumed. Electronic information resources (EIS) are the need for the research and academic activates and help in faster access and retrieval of information in various disciplines activities. Looking at the present study, the information explosion and competency in acquiring it, it is on the part of the library staff to create more awareness about the electronic information resources availability among the users and provide them a friendly environment so that they can make better use of facility (Rai, 2014). Therefore, the library staff requires training in handling the electronic information resources and users need an orientation for using them. Library staff should be provided proper training, which will help them acquiring more sophisticated searching and retrieval skills. The librarians' role has to be redefined in view of technological development keeping in mind the best interest of users and retrieval efficiency. Further result of this study confined that majority of respondents did not get any training related to Electronic information resources but they are not getting trained. Some of them are willing to get trained for some specific things like to enhance their searching skills and for using electronic information resources in better way.

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