International Journal of Research in Library Science

ISSN: 2455-104X

ISI Impact Factor: 3.723

Indexed in: IIJIF, ijindex, SJIF,ISI, COSMOS

Volume 2,Issue 2 (July-December) 2016,206-216

Received: 23 Dec .2016 ; **Accepted**: 30 Dec. 2016 ; **Published**: 6 Jan. 2017 ; **Paper ID**: IJRLS-1202

Requirement of training to use internet based electronic resources by medical professionals

Mohd Iqbal Bhat

Assistant Librarian, J&K Cultural Academy

ABSTRACT

In medical libraries, the latest technologies are increasingly used to collect, store, retrieve and disseminate a great amount of information to help medical professionals in their day-to-day education, research and clinical practices. The medical websites and databases developed by medical institutions, associations, agencies and publishers provide the latest information. In a developing country like India, medical professionals are quite aware of the new technologies used by their counterparts in the developed nations. In Jammu and Kashmir, there are nine Medical Colleges in Jammu and and Kashmir and majority of the students and faculty members require training to use electronic information sources.

Keywords: Medical College libraries, Electronic information sources, Internet & Computer literacy.

1. INTRODUCTION

Medical librarianship is fundamental to the practice of medical education and research. Its necessity in the whole functioning of library services is directly related to the importance of which individuals and society give to medical services and health care. Medical libraries are important for the organization and retrieval of the vast and continuously expanding fields of knowledge in the health sciences, and thus to the effective delivery of health care. The Indian system of Medicine has its beginning in B.C. The Ayurvedic medicine is the oldest and goes back to the days when the Aryans came to India from central Asia 2000 to 3000 years B.C. It was believed that the medical knowledge was imparted by gods to sages and the oral tradition of teaching handed down the knowledge through generations. However, the first trace of medical literature in Sanskrit was "Charaka Samhita" an immoral medical classic, written by Charak, one of the greatest physicians of ancient time (Vara Lakshmi 1993).

In medical libraries, the latest technologies are increasingly used to collect, store, retrieve and disseminate a great amount of information to help medical professionals in their day-to-day education, research and clinical practices. The medical websites and databases developed by medical institutions, associations, agencies and publishers provide the latest information. In a developing country like India, medical professionals are quite aware of the new technologies used by their counterparts in the developed nations. In Jammu and Kashmir, there are nine Medical Colleges in Jammu and and Kashmir. A survey was conducted to examine the present condition of these medical colleges, to assess the extent of meeting the information requirements of users and to identify the drawbacks in the provision of services so that the suggestions can be made to improve these services. A brief report of the survey has been presented in the following paragraphs.

2. Review of literature

There are numbers of studies on use of e-resources by students and faculty members. Achonna1 in his research found, use of e-journal resources were low. Lack of skills, inadequate provision of computers and power outrage etc. were the problems faced in use of e-resources. Study concluded the need for the training skills, provision of adequate computers; need to popularize the information technology and its usage and to motivate the students to use e-journal resources. Joteen Singh2 *et*

al. executed a study on "Use of Internet Based E-Resources at Manipur University: A Survey" to examine the use of electronic information focusing on the Internet services by post graduate students, research scholars, teachers and non-teaching staff members. Users were using the Internet mainly to download the information from web based resources and web sites. Lack of power supply and the low speed Internet access were general problems faced by users in accessing information from web based resources. Baikady and Mudhol3 explored use of web resources in learning, teaching, clinical practice, and patient care and found that users prefer web-based resources over traditional library and users perceive that web contains exhaustive information and is easy to use. Baskaran4 revealed that maximum use of library is by faculty of science particularly scientific e-journals for repairing seminars, conferences and other assignments. Bashorun5, *et al*. found that the frequency of use of electronic resources by teaching staff was low, as most of the faculty time is spent on teaching. The study also pointed out some of the problems like lack of awareness to users about electronic resources provided by the library, lack of electricity supply to use computer, slow speed of network, and inadequate searching skills. Kumar & Kumar6 found, in his study of medical and management colleges in Bangalore city that the users are well aware of e-resources and prefer to use internet.

3. Objectives of the Study

1. To identify the areas of training needed by the respondents to utilize internet resources efficiently and effectively.
2. To identify the method of training to use the e-resources to conduct the training programme in the Ayurvedic medical college.

4. Methodology

In order to know the requirement of training in the use of electronic information sources a survey was conducted. A questionnaire was prepared to collect the data pertaining to objectives. A total of 626 questionnaires were distributed among final year undergraduate, postgraduate students and faculty members of nine Medical Colleges in Jammu and and Kashmir. A response of 448 (i,e 71.56 %) questionnaires were received.

5. Need for training to use electronic information sources

The professional medical faculty members and students are the major stakeholders for whom e-resources have been acquired in the first place. End users training for the use of electronic resources should be one of the central activities in any so that faculty and students can efficiently search and use these e-resources, in which colleges and donors have made substantial investment.

However, what is important in the effective use of EIS is not so much the general training on the application of computers, but training for specific purpose, like how to browse internet, search e-books, e-journals, evaluate information on internet, etc. Thus to identify the areas of training needed to use EIS efficiently and effectively. The respondents were asked to indicate the training needs for different purposes of use of electronic information sources. The levels of perception of usefulness of all types of suggested training (essential, useful, Not useful and no opinion) were to be indicated. The responses received from the users are depicted in Table 5.1 and figure 5.1.

Table – 5.1

Areas of training needed in the use of EIS

Areas of training	No of responses (n=448)			
	Essential	Useful	Not useful	No opinion
Basic computer handling	359 (80.13)	68 (15.17)	9 (2.00)	12 (2.67)
Browsing information on internet	233 (52.00)	166 (37.05)	24 (5.35)	25 (5.58)
Using CD-ROM databases	228 (50.89)	193 (43.08)	18 (4.01)	9 (2.00)
Browsing online journals	213 (47.54)	171 (38.16)	22 (4.91)	42 (9.37)
Browsing online databases	181 (40.40)	219 (48.88)	21 (4.68)	27 (6.02)
Evaluating information on Internet	158 (35.26)	193 (43.08)	31 (6.91)	66 (14.73)

Note: Figures in the parenthesis represent percentage

It is evident from table 4.26 that majority of the respondents (80.13%) showed that training in 'basic computer handling' skill is most essential and 15.17% respondents perceived it to be useful, while very few respondents 2.0% reported that skill was not useful and 2.67% have not expressed any opinion about it. Again 52% respondents reported that training in 'browsing information on internet' skill is most essential followed by 37.05% respondents who opined it to be useful. Also same percentage of respondents (5.35% and 5.58%) indicated browsing information on internet not useful and some have no opinion about it.

About half (50.89%) of the respondents indicated training in 'CD-ROM databases' skill most essential and 43.08% are of the opinion that this skill is useful to them, whereas 4.01% found it not useful and 2% had no opinion about it. Need for training in 'browsing online journals' was indicated by 47.54% respondents as most essential skill, followed by 38.16% who found it to be useful. Again 4.91% respondents found it not useful and 9.37% respondents expressed no opinion about it.

Need for training in 'browsing online databases' was found most useful by 48.88% respondents, and 40.40% respondents expressed it to be most essential. Also 4.68% respondents indicated it to be not useful and 6.02% had no opinion about it. Training in 'evaluating information on Internet' was expressed by 35.26% respondents to be essential, followed by 43.08% who found it most useful training. 6.91% opined that it is not useful to them and 14.73% showed no opinion about it.

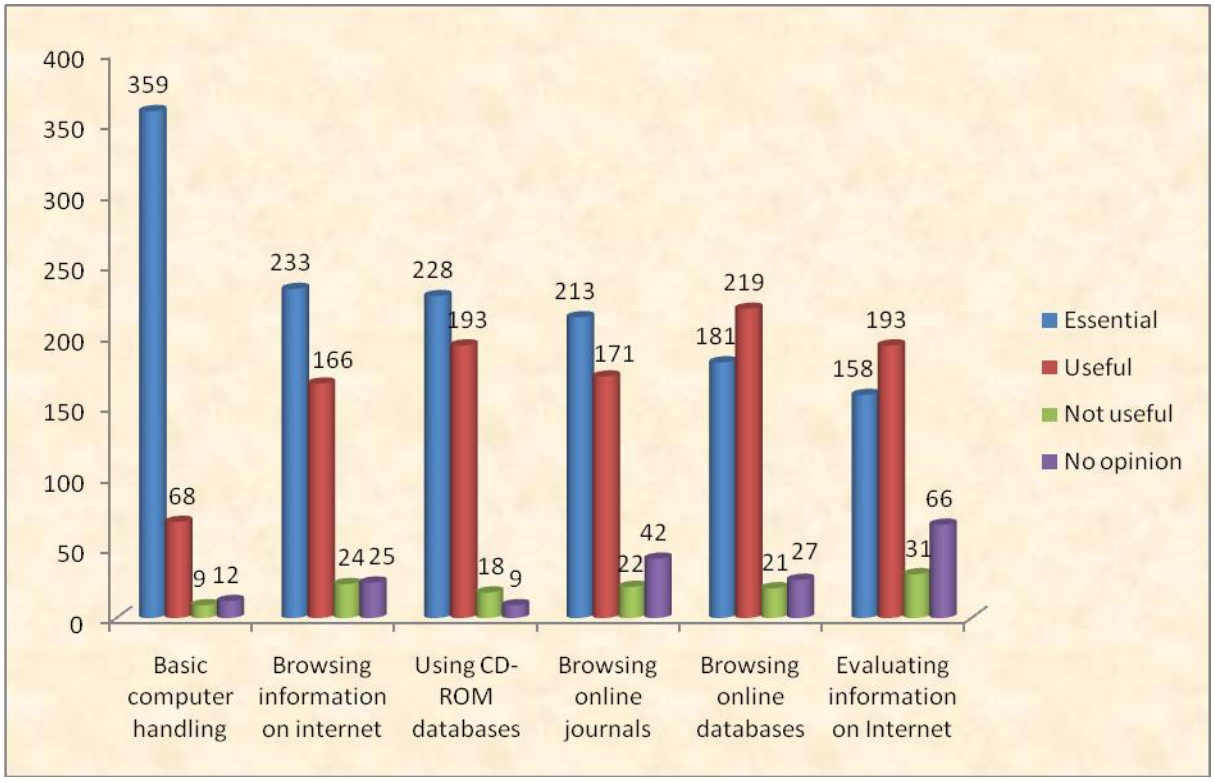

Fig: 5.1: Areas of training needed in the use of EIS

Classification of respondents by position wise status

Usefulness of the different training skills by position wise status of the respondents in the use of electronic resources is summarized in Table 5.2. The large majority of PG students (86.06%) felt that the training in 'basic computer handling' is essential, followed by 83.05% of UG final year students and 66.03% of faculty members. Basic computer handling skill is useful to 25.47% of faculty members, 9.69% of PG students and 14.12% of UG final year students. Very less percentage (3.77%, 1.81% and 1.12%) of all the three categories of respondents found 'basic computer handling skill not useful. About 3.38% UG final year students, 2.42% PG students and 1.88% of faculty members have no opinion about it.

Almost equal percentage (53.77% and 57.62%) of faculty members and UG final year students agreed with the essentiality of training skill in 'browsing information on internet' and also 44.84% of PG students agree with it. About 34.90% of faculty members, 47.27% PG students and 28.81% UG final year students realize training in 'browsing information on internet' is useful. A negligible percentage (8.49%, 6.06% and 2.82%) of all the three categories of respondents found training in 'browsing information on internet' is not useful. Also 7.54% faculty members, 3.63% PG students and 6.21% UG final year students had no opinion regarding the same.

Table 5.2

Areas of training needed by the position wise status of the respondents

Areas of training	Respondents											
	Essential			Useful			Not useful			No opinion		
	FM	PG	UG final	FM	PG	UG final	FM	PG	UG final	FM	PG	UG final
Basic computer handling	70 (66.03)	142 (86.06)	147 (83.05)	27 (25.47)	16 (9.69)	25 (14.12)	4 (3.77)	3 (1.81)	2 (1.12)	2 (1.88)	4 (2.42	6 (3.38)
Browsing information on internet	57 (53.77)	74 (44.84	102 (57.62)	37 (34.90)	78 (47.27)	51 (28.81)	9 (8.49)	10 (6.06)	5 (2.82)	8 (7.54)	6 (3.63)	11 (6.21)
Using CD-ROM databases	43 (40.56)	88 (53.33)	97 (54.80)	65 (61.32)	60 (36.36)	68 (38.41)	7 (6.60)	6 (3.63)	5 (2.82)	9 (8.49)	0 (0)	0 (0)
Browsing online journals	76 (71.69)	81 (49.09)	56 (31.63)	48 (45.28)	69 (41.81)	54 (30.50)	8 (7.54)	10 (6.06)	4 (2.25)	16 (15.09)	18 (10.90)	8 (4.51)
Browsing online databases	38 (35.84)	66 (40.00)	77 (43.50)	62 (58.49)	87 (52.72)	70 (39.54)	11 (10.37)	7 (4.24)	3 (1.69)	9 (8.49)	11 (6.66)	7 (3.95)
Evaluating information on Internet	49 (46.22)	56 (33.93)	53 (29.94)	45 (42.45)	68 (41.21)	80 (45.19)	4 (3.77)	9 (5.45)	18 (10.16)	24 (22.64)	16 (9.69)	26 (14.68)

Note: Figures in the brackets represent percentage to total in each group of respondents

FM= faculty members; PG= postgraduate students; UG= undergraduate students

A slight variation is seen among the respondents choice in developing their CD-ROM retrieval skills according to their position wise status. 53.33% of PG students and 54.80% of UG final year students training in 'using CD-ROM databases' is essential, but only 40.56% of faculty members desired the same. Faculty members comprising of 61.32%, PG students 36.36% and UG final year students 38.41% agreed that training in using CD-ROM databases is useful. Also very few respondents (6.60% of faculty, 3.63% of PG students and 2.82% of UG final year students) showed that training in CD-ROM databases is not useful. Also 8.49% of faculty members have no opinion about it.

Large majority of faculty members 71.69% showed that training in 'browsing online journals' is essential. Also 49.09% of PG students and 31.63% of UG final year students desired the same. Almost same percentage of faculty members and PG students (45.28% and 41.81%) realized that training in 'browsing online journals' is useful. UG final year students consisting of 30.50% also agrees with the same. A negligible percentage (7.54%, 6.06% and 2.25%) of all the three categories of respondents realizes that training in 'browsing online journals' is not useful. Also 15.09% faculty members, 10.90% PG students and 4.51% UG final year students have no opinion about it.

Training in browsing online databases is essential for 35.84% of faculty members, 40% PG students and 43.50% of UG final year students. Also 58.49% faculty members, 52.72% PG students and 39.54% UG final year students agreed that training in 'using online databases' is useful. 10.37% of faculty members, 4.24% of PG students and 1.69% of UG final year students realized that training in 'browsing online databases' is not useful. 8.49% of faculty members, 6.66% of PG students and 3.95% of UG final year students have no opinion about it. Evaluating information on internet and its training is essential for 46.22% of faculty members, 33.93% of PG students and 29.94% of UG final year students. Almost equal percentage (42.45%, 41.21% and 45.19%) of all the three categories of respondents showed that training in 'evaluating information on Internet' is useful. 3.77% faculty members, 5.45% PG students and 10.16% UG final year students desired that the same is not useful. Also 22.64% of faculty members, 9.69% PG students and 14.68% UG final year students have no opinion about it (fig 5.2).

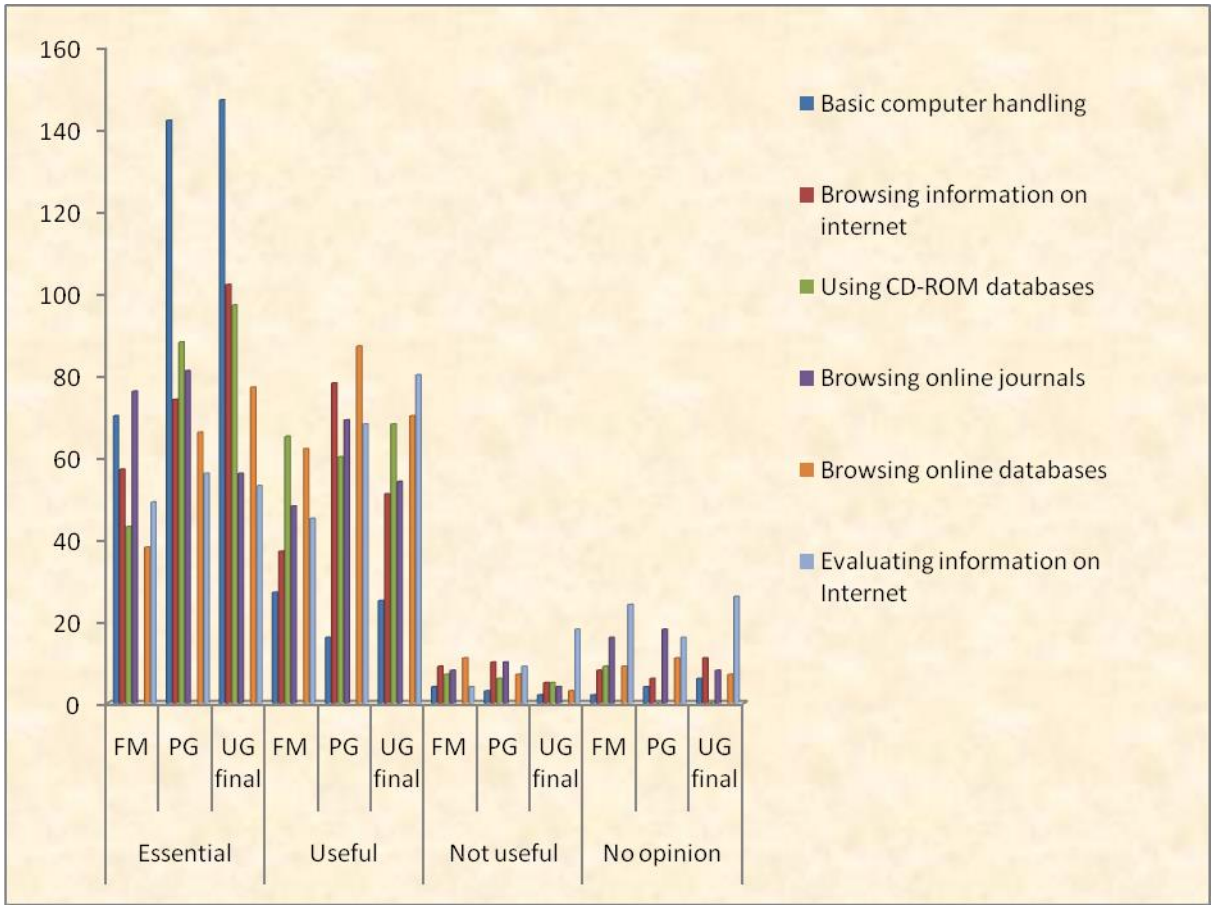

Fig: 5.2: Areas of training needed by the position wise status of the respondents

Preference for training in the use of electronic information sources

In order to utilize the growing range of electronic resources, users must acquire and practice the skills necessary to exploit them. End user training does not appear to be amenable to a single methodology since users in the various disciplines demonstrate noteworthy training preferences. The details of the study are summarized in Table 5.3.

Table 5.3

Preferred mode of training in the use of EIS

Mode of training	No of responses	Percentage
Workshop or hands-on training	319	71.20
On screen presentations (faculty /department meetings)	216	48.21
Need based support (via e-mail, telephone informal)	193	43.0
Informal small group classes	184	41.0
One- to- one demonstrations	175	39.0
Self-help guides/handouts	171	38.16
Training by central/ state government	168	37.5

Note: The respondents could answer more than one variable

It is evident from the above table that majority of respondents (71.20%) preferred 'Workshop or hands-on training' most preferred mode. 48.21% respondents perceived 'On screen presentations' to be effective mode of training. Need based support (via e-mail, telephone informal) format of training is preferred by 43% of respondents. Training mode through informal small group classes is favored by 41% respondents. Almost equal percentage of respondents (39% and 38.16%) preferred 'one- to- one demonstrations' and 'self-help guides/handouts', while only 37.5% preferred 'training by central/ state government' in the use of electronic information sources (Fig 5.3).

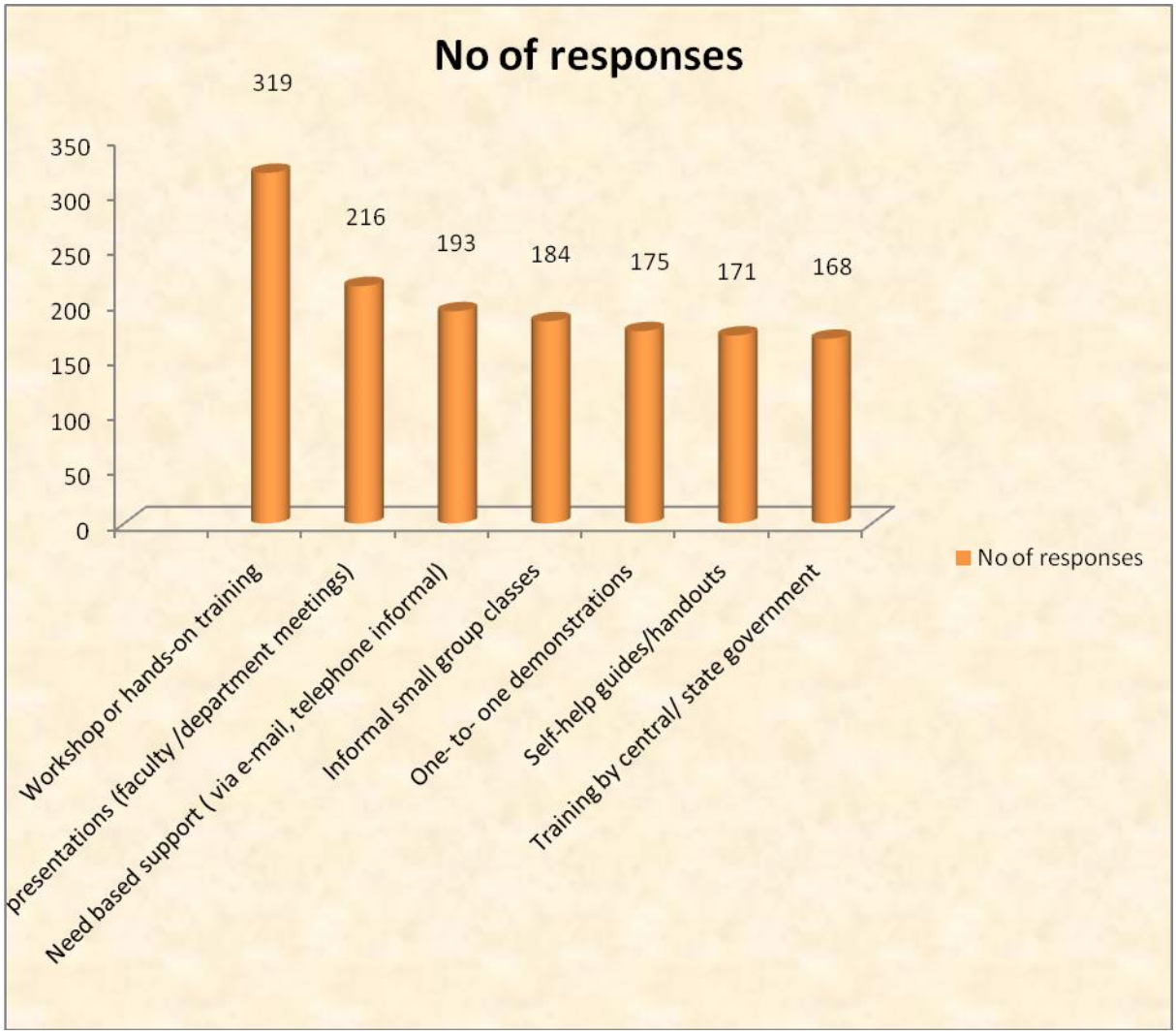

Fig: 5.3: Preferred mode of training in the use of EIS

Classification of respondents by position wise status

The respondents preferred modes of training in the use of EIS according to the position wise status of the respondents are given in Table 5.4 and figure 4.38. Results from table clearly reveal that most preferred mode of training is 'workshop or hands-on training' which is preferred by 90.56% of faculty members, 71.51% of PG students and 59.52% of UG final year students. About 54.23% of UG final year students, 46% PG students and 41.50% faculty members prefer 'On screen presentations' for improving their skills in the use of electronic information sources. Need based support assistance at the point of need is preferred by almost equal percentage 47.16% of faculty members and 48% of UG final year students, while only 35.15% PG student's preferred this mode.

Table 5.4

Preferred mode of training by position wise status of the respondents

Mode of training	Professional status		
	Faculty members	PG students	UG final year students
Workshop or hands-on training	96 (90.56)	118 (71.51)	105 (59.52)
On screen presentations (faculty /department meetings)	44 (41.50)	76 (46.0)	96 (54.23)
Need based support (via e-mail, telephone informal)	50 (47.16)	58 (35.15)	85 (48.0)
Informal small group classes	45 (42.45)	62 (37.57)	77 (43.50)
One- to- one demonstrations	41 (38.67)	55 (33.33)	79 (44.63)
Self-help guides/handouts	39 (36.79)	58 (35.15)	74 (41.80)
Training by central/ state government	33 (31.13)	49 (29.69)	86 (48.58)

Note: Respondents could answer more than one variable

Figures in the parenthesis represent percentage to total in each group of respondents

Chi-square value = 21.42* df = 12

*p-value = 0.045

Informal small group classes were preferred by 43.50% of UG final year students, 37.57% of PG students and 42.45% of faculty members. 44.63% UG final year students, 38.67% faculty members and 33.33% PG students preferred one-to-one demonstrations. Also self-help guides/handouts is preferred by 41.80% of UG final year students, 36.79% of faculty members and 35.15% of PG students. Very less number of all the three categories of respondents (31.13%, 29.69% and 48.58%) preferred 'training by central/ state government' in the use of electronic information sources.

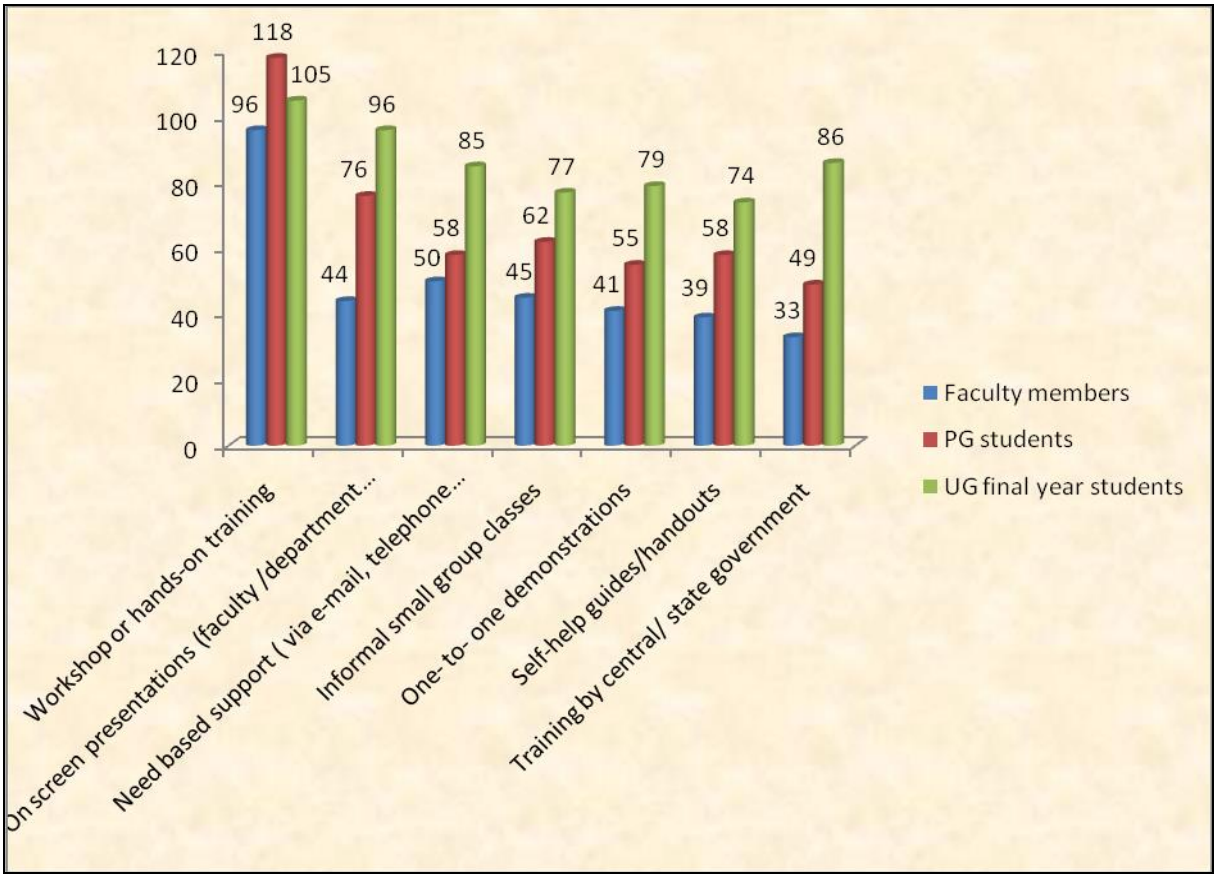

Fig: 5.4: Preferred mode of training by position wise status of the respondents

Chi-square test was applied to test preferred mode of training in EIS use on basis of position wise status of respondents. It was found that the calculated Chi-square value 21.42 is greater than the table value 21.026 on 5% significance level and indicates significant difference between various categories of respondents. Thus it implies that preferred mode of training in EIS use depends on the position wise status of respondents.

6. Conclusion

The development of medical electronic resources grossly depends on the application of computer networking technologies. Librarians have a better role to play in the process. They have to coordinate the efforts of all sections of medical or health system. Librarians are better professionals to coordinate different sections of the communication system, as they are familiar with the information work as information workers. In web based environment, role of library and information professionals have changed altogether, their role is not just as custodian of books but to teach the students how to use the existing resources, frequently organizing workshops, book talks, debates, develop web based contents and provide web based service to its client. Library professionals cannot ignore the changes in the field of ICT and redefining as well as re-engineering the library and information services is the need of the hour. Information professionals must change the way of managing documents with latest tools and technologies. Professionals must have competencies to create web pages, how to build up institutional repository. Library staff has to give instruction, training to users to promote optimum use of information sources.

.

REFERENCES

[1]. Achonna (2008). Awareness, Access and Usage of E-Journal Resources of the Library , by the Students of Yaba College of Technology, Yaba –Lagos Nigeria. Samaru Journal of Information Studies Vol. 8 (1) 2008: pp. 26-34

[2]. Joteen, K., Singh, A., Chandel, AS (2009), Use of Internet Based E-Resources at Manipur University.DESIDOC Journal of Library and Information Technology, Vol. 29 No.6, pp.13-20.

[3]. Baikady, M. R., *et al*. Web as a learning resource at the medical college libraries in coastal Karnataka: Perception of faculty and students. *DESIDOC J. Lib. Inf. Technol.*, 2011, 31(2), 121-35.

[4]. Baskaran, C. User perception of library services in academic institutions in the southern districts of Tamil Nadu, India: A case study. *Lib. Phil. Pract.*, 2011. http://unllib.unl.edu/LPP/ (accessed on 15 August 2012).

[5]. Bashorun, M., *et al*. User perception of electronic resources in the university of Ilorin, Nigeria (UNILORIN). *J. Emerg. Trend. Comp. Inf. Sci.*, 2011, 2(11), 554-62.

[6]. Kumar, Sampath B.Y. & Kumar, G.T. Perception and usage of e-resources and the internet by Indian academics. *The Electronic Library*, 2010, 28(1),137–56.

