

## **Use of Electronic information resources by the MBBS students, PG doctors and faculty members of Medical College libraries in Andhra Pradesh – a study**

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### Abstract

The present study explores the use of e-resources by the MBBS Students, PG Doctors and Faculty members in medical college libraries in Andhra Pradesh and highlights the purpose/motive of retrieving information from electronic resources. Structured questionnaire was designed for the purpose of data collection. The results of the study show that most of the respondents use electronic information resources daily. Google is the most frequently used search engine. MBBS students opined 'to prepare for examinations' and is the strongest motive of retrieving information from electronic resources, whereas for PG doctors 'participation in seminars/conferences' and Faculty members 'for writing articles'. 'Limited access to computer terminals' is the major barrier assigned by MBBS students. PG doctors and Faculty members assigned the reason as 'Too much information retrieved'. Finally, most of the respondents are dissatisfied with electronic resources provided by their libraries.

*Key words:* Electronic information resources, Medical college libraries, Search engines, Information retrieval

## **Introduction**

Electronic information is becoming prevalent worldwide, and its use is growing exponentially as more and more users are recognizing the potential that it offers in terms of access and delivery. The medical and technical education is important for the development of any country. The medical institutes are very much needed to provide disease free society in the country. Medical college students, Doctors and Faculty use the internet and electronic resources for updating their knowledge, for academics and for social communication.

## **Review of Literature**

The following studies which were conducted on usage of e-resources by medical community were reviewed.

Das and Singh (2016) found that majority of the users prefer department for accessing e-resources and E-mail has been chosen as the most popular internet service. Online databases and e-journals are the most popular electronic resources. Majority of the respondents feel fully satisfied with Internet services and electronic resources. User education and training are required for the users to know different searching techniques & development for accessing e- resources on their own. Researchers suggested that there is a need to subscribe very high bandwidth and internet connectivity for quick access to the available e- resources. Authority or administration should develop the necessary infrastructure for the development of e-resources.

Bhat and Mudhol (2014) revealed that medical faculty members and students' attitudes seem to be very positive towards e-resources for their study and research and the role of libraries as gateway to provide assistance in accessing these resources. Faculty members and students heavily depend on e-resources for their required information and to keep themselves up-to-date in their subject area. And also identified how faculty members and medical students access more and more e-resources in their respective departments or personal desktop/laptops, it seems to be more hypothetical.

Mahabaleshwara Rao, and Mudhol (2013) conducted a survey on the post graduate students and faculty of 6 medical colleges in Coastal Karnataka reveals a high degree of engagement with web based information resources. The results showed that the growing significance of internet-based information sources, have caught the fancy of professionals, students and faculty all over the worked and changing of the way learning happens. In order to cater to growing demand for information, most of the libraries have made available their collections in digital format, thus allowing medical graduate students access them from a place of their choice.

### **Objectives**

The objectives of the study are as follows:

1. To find out the use of electronic information resources by the MBBS students, PG doctors and Faculty members.
2. To know the frequently used search engines by the respondents.
3. To examine the place of access of electronic information resources by the respondents.
4. To assess the purpose/motive of retrieving information from electronic resources by the MBBS students, PG doctors and Faculty members.
5. To ascertain the barriers and overall satisfaction by the usage of electronic information resources.

### **Methodology**

The survey method of research was deployed for the present study. The population consists of MBBS students (final year students only), PG doctors and Faculty members in selected sixteen (six Government and ten Private) medical college libraries in Andhra Pradesh. To collect the data, structured questionnaire was designed in keeping view the objectives of the study. A total of 1242 questionnaires were randomly distributed among 16 Medical college library users and 986 duly filled in questionnaires were received, thus resulting into a response rate of 79.39%. The data collected from the MBBS students, PG doctors and Faculty members through questionnaire method have been analyzed and interpreted.

### **Analysis and Interpretation of Data**

This part deals with the analysis of data received through questionnaires from MBBS Students, PG Doctors and Faculty members.

Table 1

Distribution of respondents

Respondents	Total Sample	Distributed Sample	Received Sample	Percentage
MBBS Students	2450	588	490	83.33
PG Doctors	1260	302	252	83.44
Faculty Members	1761	352	244	69.32
Total	5471	1242	986	79.39

Table 1 shows that among MBBS Students, 588 questionnaires were distributed and 490 duly filled in questionnaires were received, thus resulting into a response rate of 83.33%. Among PG Doctors, 302 questionnaires were distributed and 252 duly filled in questionnaires were received, thus resulting into a response rate of 83.44%. Among Faculty members, 352 questionnaires were distributed and 244 duly filled in questionnaires were received, thus resulting into a response rate of 69.32%. The total response rate is 79.39 percent.

### **Age wise distribution of respondents**

To know the age of the respondents, a question has been asked to the respondents and the responses made by them are presented in table 2.

Table 2

Distribution of respondents according to age

Age	MBBS Students	PG Doctors	Faculty Members	Total
Below 30	485 (98.9)	4 (1.6)	0 (0.0)	489 (49.6)
31-35	5 (1.0)	240 (95.2)	6 (2.5)	251 (25.5)
36-40	0 (0.0)	8 (3.2)	58 (23.8)	66 (6.7)
41-45	0 (0.0)	0 (0.0)	163 (66.8)	163 (16.5)
46-50	0 (0.0)	0 (0.0)	15 (6.2)	15 (1.5)
Above 50	0 (0.0)	0 (0.0)	2 (0.8)	2 (0.2)
Total	490 (100)	252 (100)	244 (100)	986 (100)

*Note: Figures in parentheses denote percentages*

Table 2 proved that 49.6 per cent of total respondents come under the age group of below 30 years, 25.5 per cent under 31-35, 16.5 per cent under 41-45, 6.7 per cent under 36-40, 1.5 per cent under 46-50 and 0.2 per cent above 50.

It is also observed that majority i.e., 98.9 per cent of MBBS Students come under the age group of below 30 and only one per cent between 31-35 years. Majority i.e., 95.2 per cent of PG Doctors come under the age group of 31-35 whereas 3.2 per cent between 36-40 years and 1.6 per cent below 30. Among Faculty members 66.8 per cent come under the age group of 41-45 followed by 23.8 per cent between 36-40, 6.2 per cent between 46-50, 2.5 per cent between 31-35 and 0.8 per cent come under the age group of above 50.

It can be concluded that most of the respondents i.e., 49.6 per cent comes under the age group of below 30 years.

**Regularity of use of electronic information resources**

To know the regularity of use of electronic information resources a question has been posed to the respondents and the replies are shown in table 3.

Table 3  
 Distribution of respondents according to regularity of use of electronic information resources

Regularity of use of electronic information resources	MBBS Students	PG Doctors	Faculty Members	Total
Daily	224 (45.7)	156 (61.9)	65 (26.6)	445 (45.1)
Twice in a week	63 (12.9)	46 (18.2)	110 (45.1)	219 (22.2)
Once in a week	128 (26.1)	25 (9.9)	35 (14.3)	188 (19.1)
Once in a month	35 (7.1)	12 (4.8)	22 (9.0)	69 (7.0)
Occasionally	40 (8.2)	13 (5.2)	12 (4.9)	65 (6.6)
Total	490 (100)	252 (100)	244 (100)	986 (100)

*Note: Figures in parentheses denote percentages*

Table 3 explain that 45.1 per cent of total respondents use electronic information resources daily followed by 22.21 per cent twice in a week, 19.07 per cent once in a week, 7.00 per cent once in a month and 6.59 per cent occasionally.

It is also evident from the table that among MBBS Students 45.7 per cent use electronic resources daily followed by 26.1 per cent once in a week, 12.9 per cent twice in a week, 8.2 per cent occasionally and 7.1 per cent once in a month. Among PG Doctors 61.9 per cent use electronic resources daily followed by 18.2 per cent twice in a week, 9.9 per cent once in a week, 5.2 per cent occasionally and 4.8 per cent once in a month. Among Faculty members 45.1 per

cent use electronic resources twice in a week followed by 26.6 per cent daily, 14.3 per cent once in a week, 9 per cent once in a month and 4.9 per cent occasionally.

It can be concluded that most of the respondents i.e., 45.1 per cent use electronic information resources daily.

**Frequency of use of Search engines**

To know the frequency of use of search engines a question has been posed to the respondents and the replies are shown in table 4.

Table 4  
 Distribution of respondents according to frequency of use of search engines

Search engine	MBBS Students (n=490)		PG Doctors (n=252)		Faculty members (n=244)	
	Weighted mean score	Rank	Weighted mean score	Rank	Weighted mean score	Rank
Google	7.91 (1.444)	1	8.68 (.466)	1	6.05 (.217)	1
Yahoo	7.36 (.481)	3	6.37 (.933)	3	8.05 (.217)	2
Medscape	7.64 (.481)	2	6.73 (1.866)	2	7.05 (.217)	3
Healthline	5.64 (.481)	4	6.00 (.000)	4	5.05 (.217)	5
Health Finder	4.27 (.963)	6	5.63 (.933)	5	4.05 (.217)	6
WebMD	5.18 (2.889)	5	3.37 (.933)	6	3.00 (.000)	7
Infoseek	2.09 (1.444)	8	1.63 (.933)	9	1.13 (.338)	9
Alta vista	3.27 (.963)	7	1.68 (.466)	8	1.97 (.573)	8
MSN	1.64 (.481)	9	3.32 (.466)	7	8.61 (1.734)	4

*Note: Figures in parenthesis denote standard deviation values*

Table 4 illustrate that all the respondents assigned first rank to Google search engine with regard to frequency of use of search engines. MBBS students & PG doctors assigned 2<sup>nd</sup> rank to Medscape search engine but the faculty members gave 2<sup>nd</sup> rank to yahoo search engine. Both MBBS students and PG doctors gave 3<sup>rd</sup> rank to yahoo search engine where as faculty members gave 3<sup>rd</sup> rank to Medscape search engine. Both MBBS students and PG doctors assigned 4<sup>th</sup> rank to Healthline search engine where as faculty members gave 4<sup>th</sup> rank to MSN (Microsoft Network) search engine. MBBS students gave 5<sup>th</sup> rank to WebMD, PG doctors for Healthfinder and faculty members for Healthline. MBBS students gave 6<sup>th</sup> rank to Healthfinder, PG doctors for WebMD and faculty members for Healthfinder. MBBS students gave 7<sup>th</sup> rank to Alta vista, PG doctors for MSN and faculty members for WebMD. MBBS students gave 8<sup>th</sup> rank to infoseek and both PG doctors and faculty members for Alta vista. MBBS students gave 9<sup>th</sup> rank to MSN and both PG doctors and faculty members for infoseek.

It can be concluded that Google is the most frequently used search engine followed by yahoo and medical search engines.

**Preference of format for getting information**

In order to know the preference of format for getting information a question has been posed to the respondents and the replies are shown in table 5.

Table 5  
 Distribution of respondents showing preference of format for getting information

Preference of format for getting information	MBBS Students	PG Doctors	Faculty Members	Total
Print	92 (18.8)	76 (30.2)	48 (19.7)	216 (21.9)
Electronic	109 (22.2)	78 (30.9)	72 (29.5)	259 (26.3)
Both	289 (59.0)	98 (38.9)	124 (50.8)	511 (51.8)
Total	490 (100)	252 (100)	244 (100)	986 (100)



*Note: Figures in parentheses denote percentages*

Table 5 demonstrates that out of total respondents 51.8 per cent preferred both print and electronic format for getting information followed by 26.3 per cent electronic format and 21.9 per cent print format.

It is also evident from the table that among MBBS students 59 per cent prefer both print and electronic formats followed by 22.2 per cent electronic and 18.8 per cent print. Among PG doctors 38.9 per cent prefer both formats followed by 30.9 per cent electronic and 30.2 per cent print. Among faculty members 50.8 per cent prefer both formats followed by 29.5 per cent electronic and 19.7 per cent print.

It can be concluded that most of the respondents prefer both print and electronic version of information.

**Place of access of electronic information resources**

To know the place of access of electronic information resources a question has been posed to the respondents and the replies are shown in table 6.

Table 6

Distribution of respondents according to place of access of Electronic information resources

Access Point	MBBS Students (n=490)				PG Doctors (n=252)				Faculty Members (n=244)			
	F	S	R	WS	F	S	R	WS	F	S	R	WS
Central Library	142 (29.0)	334 (68.2)	14 (2.9)	1108	162 (64.28)	167 (66.3)	13 (5.2)	833	16 (6.6)	109 (44.7)	219 (89.8)	485
Departmental Library	15 (3.1)	25 (5.1)	450 (91.8)	545	16 (6.3)	177 (70.2)	69 (27.4)	471	224 (91.8)	8 (3.3)	12 (4.9)	700
Home	47 (9.6)	14 (2.9)	429 (87.6)	598	16 (6.3)	11 (4.4)	225 (89.3)	295	15 (6.1)	12 (4.9)	63 (25.8)	132
Commercial Browsing Centre	6 (1.2)	148 (30.2)	336 (68.6)	650	26 (10.3)	55 (21.8)	171 (67.9)	359	13 (5.3)	12 (4.9)	119 (48.8)	182
Through Mobile /Laptops	467 (95.3)	11 (2.2)	12 (2.4)	1435	121 (48.01)	15 (6.0)	16 (6.3)	409	199 (81.6)	166 (68.0)	33 (13.5)	962

Note: Figures in parentheses denote percentages  
 F-Frequently S-Sometimes R-Rarely; WS – Weighted Scores

ANOVA						
Source of Variation	SS	Df	MS	F-cal	P-value	F critical
Between respondents	792364.93	4	198091.23	2.04 <sup>@</sup>	0.17	3.48
Within respondents	973194.00	10	97319.40			
Total	1765558.93	14				

@ - Not significant      Based on weighted scores

Table 6 confirm that majority (95.3%) of the MBBS students are using electronic information resources frequently through their mobiles/laptops followed by 68.2 per cent sometimes in central library and 91.8 per cent rarely in departmental library. Majority (95.3%) of the PG doctors are using electronic information resources frequently through their mobiles/laptops followed by 68.2 per cent sometimes in central library and 91.8 per cent rarely in departmental library. Majority (91.8%) of the faculty members are using electronic information resources frequently in departmental library followed by 68 per cent sometimes through mobiles/laptops and 89.8 per cent rarely in central library.

ANOVA (one way classification) has been attempted to find out the extent of variance between respondents according to place of access of electronic information resources, since calculated value is less than the table value, there is no significance in variance between the respondents.

It can be concluded that majority of respondents are using electronic information resources frequently through their mobiles/laptops.

**Purpose/motive of retrieving information from electronic resources**

An attempt has been made to assess the purpose /motive of retrieving information from electronic resources by the MBBS students, PG doctors and faculty members and the replies are shown in tables.

Table 7  
 Distribution of MBBS Students according to purpose/motives of retrieving information from electronic resources

Motives	MBBS Students (n= 490)					WS	WMS Average (n=490)	Rank
	SM	FM	AM	WM	NM			
To prepare for examinations	359 (73.3)	103 (21.0)	20 (4.1)	6 (1.2)	2 (0.4)	2281	4.66	1
To prepare for projects	26 (5.3)	99 (20.2)	327 (66.7)	26 (5.3)	12 (2.4)	1571	3.21	9
General awareness for new knowledge	43 (8.8)	100 (20.4)	298 (60.8)	35 (7.1)	14 (2.9)	1593	3.25	8
For participation in seminars/ conferences etc. (To prepare for seminars)	287 (58.6)	144 (29.4)	37 (7.6)	16 (3.3)	6 (1.2)	2160	4.41	2
To increase promotional opportunities	66 (13.5)	105 (21.4)	263 (53.7)	29 (5.9)	27 (5.5)	1624	3.31	6
For writing articles	50 (10.2)	324 (66.1)	67 (13.7)	22 (4.5)	27 (5.5)	1818	3.71	4
For checking the authenticity of clinical information	51 (10.4)	323 (65.9)	73 (14.9)	16 (3.3)	27 (5.5)	1825	3.72	3
To broaden the area of attention and work done in related areas	72 (14.7)	271 (55.3)	75 (15.3)	45 (9.2)	27 (5.5)	1786	3.64	5
For the diagnosis and therapeutic treatment of patients and for the management of clinical practice	33 (6.7)	131 (26.7)	207 (42.2)	79 (16.1)	40 (8.2)	1508	3.08	11
For pleasure of doing good work, self fulfillment and self satisfaction	37 (7.6)	90 (18.4)	290 (59.2)	23 (4.7)	50 (10.2)	1511	3.08	10
To have visibility among peers	40 (8.2)	120 (24.5)	269 (54.9)	49 (10.0)	12 (2.4)	1597	3.26	7

Note: Figures in parentheses denote percentages, WS-Weighted Score  
 SM-Strongest Motive, FM- Fairly Motive, AM- Average Motive, WM- Weakest Motive, NM- Non Motive

Table 7 reveals that 73.3 per cent of MBBS students replied ‘to prepare for examinations’ is the strongest motive of retrieving information from electronic resources followed by 58.6 per cent for ‘participation in seminars/conferences’ and the least per cent i.e., 5.3 ‘to prepare projects’. It is also observed that 66.1 per cent of MBBS students mentioned ‘for writing articles’ is the fairly motive followed by ‘for checking the authenticity of clinical information’ and the least per cent i.e., 18.4 ‘for pleasure of doing good work, self fulfillment and self satisfaction’.

Weighted mean score for ‘to prepare for examinations’ and ‘for participation in seminars/conferences’, lies between 4-5, since these factors played a significant role and the remaining factors lies between 3-4, since these factors are less important in their expectations.

It can be concluded that majority of MBBS students replied ‘to prepare for examinations’ is the strongest motive of retrieving information from electronic resources.

**Table 8**  
 Distribution of PG Doctors according to purpose/motive of retrieving information from electronic resources

Motives	PG Doctors (n= 252)					WS	WMS Average (n=252)	Rank
	SM	FM	AM	WM	NM			
To prepare for examinations	71 (28.2)	139 (55.2)	28 (11.1)	2 (0.8)	12 (4.8)	1011	4.01	3
To prepare for projects	20 (7.9)	138 (54.8)	61 (24.2)	21 (8.3)	12 (4.8)	889	3.53	8
General awareness for new knowledge	24 (9.5)	129 (51.2)	54 (21.4)	33 (13.1)	12 (4.8)	876	3.48	10
For participation in seminars/ conferences etc.	174 (69.0)	29 (11.5)	14 (5.6)	18 (7.1)	17 (6.7)	1081	4.29	1
To increase promotional opportunities	43 (17.1)	123 (48.8)	61 (24.2)	8 (3.2)	17 (6.7)	923	3.66	5
For writing articles	159 (63.1)	28 (11.1)	42 (16.7)	6 (2.4)	17 (6.7)	1062	4.21	2
For checking the authenticity of clinical information	28 (11.1)	163 (64.7)	40 (15.9)	4 (1.6)	17 (6.7)	937	3.72	4

To broaden the area of attention and work done in related areas	36 (14.3)	139 (55.2)	42 (16.7)	18 (7.1)	17 (6.7)	915	3.63	6
For the diagnosis and therapeutic treatment of patients and for the management of clinical practice	118 (46.8)	11 (4.4)	50 (19.8)	44 (17.5)	29 (11.5)	901	3.58	7
For pleasure of doing good work, self fulfillment and self satisfaction	12 (4.8)	135 (53.6)	51 (20.2)	6 (2.4)	48 (19.0)	813	3.23	11
To have visibility among peers	27 (10.7)	121 (48.0)	64 (25.4)	28 (11.1)	12 (4.8)	879	3.49	9

*Note: Figures in parentheses denote percentages*

*SM- Strongest Motive, FM- Fairly Motive, AM- Average Motive, WM- Weakest Motive, NM- Non Motive, WS- Weighted Score*

Table 8 exhibit that 69 per cent of PG doctors replied ‘for participation in seminars/conferences’ is the strongest motive of retrieving information from electronic resources followed by 63.1 per cent for writing articles and the least per cent i.e., 4.8 for pleasure of doing good work, self fulfillment and self satisfaction’.

Weighted mean score for ‘for participation in seminars/ conferences etc.’, ‘for writing articles’ and ‘to prepare for examinations’ lies between 4-5, since these factors played a significant role and the remaining factors lies between 3-4, since these factors are less important in their expectations.

It can be concluded that most of the PG doctors replied ‘for participation in seminars/conferences’ is the strongest motive.

Table 9  
 Distribution of faculty members according to purpose/motive of retrieving information from electronic resources

Motives	Faculty Members (n= 244)					WS	WMS Average (n=244)	Rank
	SM	FM	AM	WM	NM			
To prepare for examinations	6 (2.5)	8 (3.3)	41 (16.8)	188 (77.0)	1 (0.4)	562	2.30	11
To prepare for projects	7 (2.9)	63 (25.8)	156 (63.9)	16 (6.6)	2 (0.8)	789	3.23	10
General awareness for new knowledge	11 (4.5)	154 (63.1)	66 (27.0)	10 (4.1)	3 (1.2)	892	3.66	8
For participation in seminars/ conferences etc.	18 (7.4)	200 (82.0)	8 (3.3)	11 (4.5)	7 (2.9)	943	3.86	4
To increase promotional opportunities	19 (7.8)	172 (70.5)	30 (12.3)	16 (6.6)	7 (2.9)	912	3.74	7
For writing articles	184 (75.4)	18 (7.4)	28 (11.5)	8 (3.2)	6 (2.4)	1098	4.50	1
For checking the authenticity of clinical information	15 (6.1)	170 (69.7)	48 (19.7)	3 (1.2)	8 (3.2)	913	3.75	6
To broaden the area of attention and work done in related areas	36 (14.8)	154 (63.1)	31 (12.7)	16 (6.6)	7 (2.9)	928	3.80	5
For the diagnosis and therapeutic treatment of patients and for the management of clinical practice	105 (43.0)	99 (40.6)	6 (2.5)	24 (9.8)	10 (4.1)	997	4.09	3
For pleasure of doing good work, self fulfillment and self satisfaction	10 (4.1)	161 (66.0)	49 (20.1)	14 (5.7)	10 (4.1)	879	3.60	9
To have visibility among peers	68 (27.9)	147 (60.2)	17 (7.0)	10 (4.1)	2 (0.8)	1001	4.10	2

Note: Figures in parentheses denote percentages

SM- Strongest Motive, FM- Fairly Motive, AM- Average Motive, WM- Weakest Motive, NM- Non Motive, WS- Weighted Score

Table 9 shows that 75.4 per cent of faculty members replied ‘for writing articles’ is the strongest motive of retrieving information from electronic resources followed by ‘for the diagnosis and therapeutic treatment of patients and for the management of clinical practice’ and the least per cent i.e., 2.9 given ‘to prepare for projects’.

Weighted mean score for ‘writing articles’, ‘to have visibility among peers’, ‘for the diagnosis and therapeutic treatment of patients and for the management of clinical practice’ lies between 4-5, since these factors played a significant role and the remaining factors namely ‘for participation in seminars/conferences etc.’, ‘to broaden the area of attention and work done in related areas’, ‘for checking the authenticity of clinical information’, ‘to increase promotional opportunities’, ‘general awareness for new knowledge’, ‘for pleasure of doing good work, self fulfillment and self satisfaction’ and ‘to prepare for projects’ lies between 3-4, and the last factor namely ‘to prepare for examination.3001ns’ lies between 2-3, since this is less important in their expectations.

It can be concluded that most of the faculty members replied ‘for writing articles’ is the strongest motive.

**Barriers while accessing electronic resources**

In order to know the barriers while accessing electronic resources a question has been posed to the respondents and the replies are shown in table.

Table 10  
 Distribution of respondents showing barriers while accessing electronic resources

Barriers	MBBS Students (n=490)		PG Doctors (n=252)		Faculty members (n=244)	
	Weighted mean score	Rank	Weighted mean score	Rank	Weighted mean score	Rank
Poor Internet connectivity	8.390 (0.863)	2	1.579 (1.458)	9	6.008 (1.247)	5

Limited access to computer terminals	9.829 (1.056)	1	3.024 (.378)	7	2.328 (.470)	9
Problem with back issues	3.729 (1.709)	7	8.619 (.678)	2	7.672 (.470)	2
Lack of awareness	7.437 (.647)	3	5.349 (.478)	6	1.328 (.470)	8
Too much information retrieved	4.878 (1.082)	5	9.829 (1.204)	1	9.648 (1.189)	1
Irrelevant responses	1.220 (1.123)	9	7.000 (.000)	3	3.328 (.470)	6
Staff not always available to help	3.902 (1.012)	6	5.651 (.478)	5	6.684 (.900)	3
Inaccessibility to required e-resources	6.447 (0.711)	4	5.694 (2.388)	4	6.311 (1.882)	4
Congestion in computer labs	2.498 (.724)	8	1.651 (.478)	8	5.311 (1.882)	7

*Note: Figures in parenthesis denote standard deviation values*

Table 10 reveals that MBBS students assigned first rank to ‘limited access to computer terminals’ is the main barrier while accessing electronic resources where as PG doctors assigned ‘too much information retrieved’. MBBS students gave 2<sup>nd</sup> rank for ‘Poor Internet connectivity’ where as PG doctors for ‘problem with back issues’. MBBS Students gave 3<sup>rd</sup> rank for ‘Lack of awareness’ where as PG doctors for ‘irrelevant responses’. Both MBBS students and PG doctors were given 4<sup>th</sup> rank for ‘Inaccessibility to required e-resources’. MBBS students gave 5<sup>th</sup> rank for ‘Too much information retrieved’ where as PG doctors for ‘Staff not always available to help’. MBBS Students gave 6<sup>th</sup> rank for ‘Staff not always available to help’ where as PG doctors for ‘Lack of awareness’. MBBS students gave 7<sup>th</sup> rank for ‘Problem with back issues’ where as PG doctors for ‘Limited access to computer terminals’. Both MBBS students and PG doctors were



given 8<sup>th</sup> rank for ‘Congestion in computer labs’. MBBS Students gave last rank i.e., 9<sup>th</sup> rank for ‘Irrelevant responses’ where as PG doctors for ‘Poor Internet connectivity’.

Faculty members assigned first rank for ‘Too much information retrieved’, 2<sup>nd</sup> rank for ‘Problem with back issues’, 3<sup>rd</sup> rank for ‘Staff not always available to help’, 4<sup>th</sup> rank for ‘Inaccessibility to required e-resources’, 5<sup>th</sup> rank for ‘Poor Internet connectivity’, 6<sup>th</sup> rank for ‘Congestion in computer labs’, 7<sup>th</sup> rank for ‘Irrelevant responses’, 8<sup>th</sup> rank for ‘Limited access to computer terminals’ and 9<sup>th</sup> rank for ‘lack of awareness’.

It can be concluded that ‘Limited access to computer terminals’ is the major barrier assigned by MBBS students, whereas PG doctors and faculty members assigned ‘Too much information retrieved’ is the major barrier.

**Overall Satisfaction with electronic resources in their libraries**

In order to know the overall satisfaction with electronic resources in their libraries a question has been posed to the respondents and the replies are shown in table 11.

Table 11

Distribution of respondents according to satisfaction with electronic resources

Satisfaction	MBBS Students	PG Doctors	Faculty Members	Total
Very much satisfied	79 (16.1)	11 (4.4)	6 (2.4)	96 (9.7)
Satisfied	132 (26.9)	35 (13.9)	38 (15.6)	205 (20.8)
Somewhat satisfied	149 (30.4)	82 (32.5)	60 (24.6)	291 (29.5)
Dissatisfied	130 (26.5)	124 (49.2)	140 (57.4)	394 (39.9)
Total	490 (100)	252 (100)	244 (100)	986 (100)

*Note: Figures in parentheses denote percentages*

Table 11 confirms that out of total respondents 39.9 per cent are dissatisfied with electronic resources provided by their libraries, 29.5 per cent are somewhat satisfied, 20.8 per cent are satisfied and 9.7 per cent are very much satisfied.

It is also evident that among MBBS students 30.4 per cent are somewhat satisfied, 26.9 per cent are satisfied, 26.5 per cent are dissatisfied and 16.1 per cent are very much satisfied. Among PG doctors 49.2 per cent are dissatisfied, 32.5 per cent are somewhat satisfied, 13.9 per cent are satisfied and 4.4 per cent are very much satisfied. Among faculty members 57.4 per cent are dissatisfied, 24.6 per cent are somewhat satisfied, 15.6 per cent are satisfied and 2.4 per cent are very much satisfied.

It can be concluded that most of the respondents are 'dissatisfied' with electronic resources provided by their libraries followed by 'somewhat satisfied'.

### **Findings**

1. Most of the respondents come under the age group of below 30 years.
2. Most of the respondents use Electronic Information Resources daily.
3. Google is the frequently used search engine by majority of the respondents.
4. Most of the respondents prefer both print and electronic version of information.
5. Majority of respondents are using electronic information resources frequently through their mobiles/laptops.
6. Majority of MBBS Students opined 'to prepare for examinations' is the strongest motive of retrieving information from electronic resources.
7. Majority of PG Doctors replied 'for participation in seminars/conferences' is the strongest motive of retrieving information from electronic resources.
8. Majority of Faculty members replied 'for writing articles' is the strongest motive of retrieving information from electronic resources.
9. 'Limited access to computer terminals' is the major barrier assigned by MBBS Students, whereas PG Doctors and Faculty members assigned 'Too much information retrieved' is the major barrier.
10. Most of the respondents are 'dissatisfied' with electronic resources provided by central library followed by 'somewhat satisfied'.

### **Suggestions**

Based on the various observations of the study the following suggestions are made:

1. More computer terminals should be installed in the library for easy access to faculty members and students.
2. Increasing resources should be allocated for enriching electronic resources for the benefit of users.
3. Awareness should be generated on the e-resources to obtain current information.
4. Number of orientation programmes should be organized by medical libraries at regular intervals so that the maximum users can improve their excellence or proficiency in the use of e-resources further it may lead to increase their satisfaction levels with regard to usage of electronic resources.

### **Conclusion**

Internet has emerged as most powerful medium for storage and retrieval of information and the development of e-resources have had an important impact on the way the academic community uses stores and preserves information. From this study it is clear that electronic resources are useful to medical professionals. Medical professional libraries give more importance to providing access to electronic resources. Therefore, library authorities or administration may take initiatives to improve the information searching capabilities among the medical library users in terms of using electronic resources. Library professionals who are associating with medical libraries should also take necessary steps to improve their awareness and utilization of the available e-resources.

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