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A Study on Information Seeking Behavior of the Medical and Allied College Students in Goa State

Dr. Jayaprakash G. Hugar
Dnyanprassarak Mandal's College and Research Centre, Assagao, Mapusa, Goa, dmclibrarian@rediffmail.com

Dr. Jayaprakash G. Hugar
Dnyanprassarak Mandal's College and Research Centre, Assagao, Mapusa, Goa

B U. kannappanavar Dr,
Sahyadri Arts Collge, Shimoga

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Dr. B. U. Kannappanavar*

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Dr. Jayaprakash G Hugar**

Abstract:

This paper attempts to explore the information seeking behavior of medical, dental, nursing, pharmacy and homeopathic colleges in goa state. The purpose of the study is to know the awareness and use of reference sources available in the library and to know the preference of media as a source of information for their requirement. Results found that, still 95 percent respondents refer/depend upon printed books for their information needs.Only 49 percent students are happy with the internet and online resources available in their college libraries. Further researcher suggested that, the library orientation has to be conducted regularly to convert another 30 percent students to make use of their college library by giving more importance to electronic sources and services.

Keywords: Information Seeking Behavior, Medicine, Goa, Information Needs,

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*Dr. B. U. Kannappanavar, Librarian, Sahayadri College, Shivamogga, Karnataka – 837370. Email: kannappanavar@gmail.com

**Dr. Jayaprakash G Hugar, Librarian, Dnyanprassarak Mandal's College and Research Centre, Assagao, Bardez, Goa – 403 507. Email: dmclibrarian@rediffmail.com, ORCID No. http://orcid.org/0000-0001-8307-5582.

1. Introduction

Now a day, Internet is treated as a mine of information; it provides variety of information on different subjects. The development and rapid growth of Information Communication Technologies such as e-journals, e-books, etc., made the libraries to change from traditional print media (of information provider) to the online information centers. This Internet changed the life of library and information centers worldwide. Internet has emerged as the most important and powerful medium of storage and retrieval of information. Easy availability of Information on the online and offline, made the users to make use of electronic resources more compared to the printed sources or traditional libraries. In Goa, use of internet/computer has been accelerated when the Government of Goa has introduced Cyber Age Scheme in the year 2003-04. Under this scheme, all the students of 11^{th} standard are getting desktop (now it is laptop) at free of cost for making use of it for their educational purpose.

2. Information Seeking Behaviour

Information seeking behavior is a broad term. It is the technique or the process of searching for the information. Information seeking behavior depends on the types of information need of the people. So information seeking behavior depends on the types of information need of the people. So information seeking behavior arises when the person is able to recognize what type of information is needed, what are the goals or objectives and what kind of information resources to use. “It involves a set of actions that an individual, takes to express information needs, seek information, evaluate and select information and finally uses this information to satisfy his / her information needs (Fatima, 2008).

3. Objectives of the Study

3.1 To know the purpose of the students visit to the library.

3.2 To find out the awareness and use of reference sources available in the library.

3.3 To determine the preference of media as a source of information for their requirement.

4. Methodology

We have adopted survey method for the primary data collection purpose. A suitable questionnaire was designed according to its objectives and distributed to students of medical, dental, homeopathic, pharmacy and nursing colleges in Goa state and collected the required primary data and analyzed with the help of SPSS software.

5. Literature Review

There are number of studies on the use of electronic resources and its impact by teachers, students etc. In this article an attempt is made to review the literature related to the present study.

5.1 **Asemi, Asefeh** (2005) made a survey on the search habits of Internet users at the Medical University of Isfahan (MUI), a governmental university in Isfahan city, Iran. Efforts are on to find the search requirements related to the use of the Internet information. Using a questionnaire and follow-up interviews with Internet users from five faculties collected data. Results show that all the respondents are using the Internet frequently because all faculties have provided connection to the Internet. It is revealed that the researchers of MUI are getting quality information through the Internet. They use the Internet in different ways, such as accessing to online journals, downloading software or text, chatting, discussion, E-mail services and for finding related references. Also it is observed that the Google and Yahoo search engines are more widely used compared to other search engines. The analysis reveals that 54 percent of Internet users always find useful information on the Internet and finally, 35% of the studied population use print, online and offline form of information for updating their subject knowledge.[1]

5.2 **Atlas, Michel C and others** (2007) have made an attempt to study who borrows laptop computers in an academic health sciences library? Why do they choose to check out laptops? In a survey, laptop computer users responded that the laptops were used most frequently to do class-related work. Laptops were most often checked out because they could be taken to a

quiet area of the library or to where the user had more room to work. The majority of such borrowers were satisfied or very satisfied with the laptops and the service from the library. The majority of those completing the survey were medical school students and graduate students. The circulation of laptop computers at this academic health sciences library is a very successful and popular program.[2]

5.3 **Biradar, B.S. and Maranna, O** (2011) have made a survey indicating the use of electronic resources and services in Marine science research institution libraries by marine scientists in south India. This survey was carried out among marine science research scientists; along with observations at the marine science departments in south India. Information about the availability and use of electronic resources and services, place of access, the purpose of using e-resources, the rank values of use of e-resources in research and teaching, the users visit and time spent on use of e-resources and extent of user's satisfaction with e-resources. Suggestions are also given to strengthen the existing e-resources collection and services.[4]

5.4 **Lorence, Daniel and Park, Heeyoung** (2007) had made an attempt to study the extent to which health information seeking behaviors vary across genders or are differentially associated with access to computers, the Internet, and online health information. Researcher conducted a stratified survey and analyses the databy using binary logistic regression examined information-seeking differences between demographic groups. Research revealed that, the information seeking variation across gender groups and between technologies was at times significant. There was little difference in the access to computer between females and males. In 2002, 75.4% and 73.1% of female and male participants reported that they occasionally use computers, respectively. In 2000, the respective figures were 72.4% and 72.7%. Concluded that, the recent technology initiatives in the US aimed at reducing disparities in access to online resources appear to have had little effect in facilitating equal access to web-based health information.[7]

5.5 **Pattanaik, Babita and Pattanaik, BibhutiBhusan** (2011) investigated the internet searching habit and information-seeking behaviour of faculty members of science department of North Orissa University. They have formulated a structured questionnaire and distributed

among all the faculty members of science department at North Orissa University (NOU) in order to ascertain their web searching habit. They made an attempt to find insight into the current state of practices of faculties in the department and their understanding about information searching process on internet. The outcome and suggestions of the study would be beneficial for them to take appropriate measures to improve their web searching skills.[8]

5.6 **Zhang, Y** (2001) has made an attempt to examine the use of Internet-based electronic resources (e-sources) by a group of library and information science scholars. Article focuses on how scholars use, cite, and evaluate e-sources during the research process. Also explores the problems scholars encounter and concerns they have when using e-sources for research. Summarizes the major problems and concerns reported by scholars, and discusses both the theoretical implications and practical applications of the findings.[11]

6. Data Analysis and Interpretation

Table 1: Gender& Age-wise distribution of respondents

Respondents	Students	Percentage
Male	100	23.8
Female	320	76.2
Total	**420**	**100**
Age Group (in years)	**Students Respondents**	**Percentage**
17 to 19	233	55.5
20 to 25	181	43.2
25 to 30	5	1.1
30 to 35	1	0.2
Total	**420**	**100.0**

Source: Field survey.
Note: Figures in parenthesis denotes percentage to the total

The above table reveals that among the faculties there is no considerable difference between male and females respondents but with regard to students respondents one fourth of them are male and remaining are females. This difference is justified from the X^2 test when it was applied to the data in the above table.

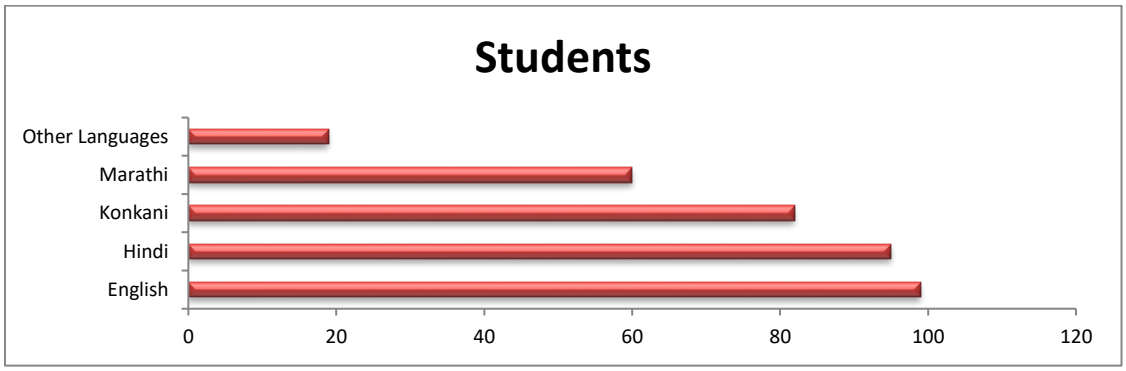
As it is studied that both male and female respondents are to be given equal preference, similarly, same importance is also to be given to all the age groups while selecting the respondents. With this respect, in the study area, the age of faculties ranges from 20 years up to 45 years and above. Like that the age of students ranges in between 17 to 35 years out of which majority of the students are within the age of 25 years accounting for about 98.7 percent. Only about 1.3 percent of the students are above 31 years which indicates they might be post graduate students. With regard to the overall respondents, about 92 percent of the respondents are below age 25 years and the remaining is above 25 years. Like that the percentage of students is more than faculties among the respondents in the age group of 20 to 25 years and in the age group of 25 to 30 years and 30 to 35 years the percentage of faculties is more than students.

Table 2: Language-wise distribution of respondents

Languages Known	Students	Percentage
English	416	99.0
Hindi	397	94.5
Konkani	344	81.9
Marathi	251	59.8
Other Languages*	78	18.6

Source: Field survey.
Note: Figures in parenthesis denotes percentage to the total
* = Portuguese, Sanskrit, French, Kannada and Malayam

Graph 1: Column chart representing percentage of language wise distribution of respondents



Source: Table 3

The data in the above table reveals that Hindi language is most familiar among the respondents as the percentage of respondents knowing English language is about 99 percent where the percentage of faculties is 95 and students is 99 percent followed by Hindi accounting 95 percent with 95 percent of faculties and students each and then Konkani having 81 percent of respondents with 72 percent of faculties and 82 percent of students. However, still about 60 percent of the respondents do familiar with local language Marathi owe 55 percent of faculties and 60 percent of students. At the same time about one fifth of the respondents know other language like Bengali, Kannada, Malayalam, Sanskrit, Portuguese and French. Out of total respondents of faculties, 25 of them are familiar with other language as against to the students whose percentage is very close to it that is 19 percent. All these indicate that respondents are very familiar with English, Hindi and Konkani languages in the study area.

Table 3: Respondent's purpose of Library visit

Purpose of Visit to the Library	Students			
	Yes	**Percentage**	**No**	**Percentage**
Borrow a book	295	70.2	125	29.8
Refer the books / journal	283	67.4	137	32.6
Read magazines	81	19.3	339	80.7
Prepare assignment and notes	227	54.0	193	46.0
Search the source book of general knowledge	29	6.9	391	93.1
Search database and CD's	11	2.6	409	97.4
Use Internet and search online source	39	9.3	381	90.7
Recreation and meeting friends	42	10.0	378	90.0

Source: Field survey.

Note: Figures in parenthesis denotes percentage to the total

With respect to various purposes of library visits, in the study area it is studied that, major purpose of visit to library will be to borrow book which is around 69 percent followed by referring the book or journals and prepare assignments or notes accounting for about 68 and 52 percent respectively. Students visit library more than faculties to borrowing book and preparing assignments as their percentage which is about 70 and 54 is more than faculties which is 59 and 26 percent. But faculties visit library more for referring books or journals than students whose percentage is about 72 and 67 respectively. One fifth of the respondents visit to library is for reading magazines where again the percentage of faculty's is more than the percentage of student's. With respect to the remaining purposes of visit to library like for searching source

book of general knowledge, search database and CDs, use internet and search online resources and for recreation and meeting is very low which is below 10 percent. Therefore, it can be concluded that the main purpose of visiting library will be either borrow book or to refer book/ journal or to prepare assignments / notes.

ANOVA Analysis:

H_0: There is insignificant difference among the respondents regarding purpose of visiting library.

H_1: There is significant difference among the respondents regarding purpose of visiting library.

ANOVA Table						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	52900	1	52900	7.16277023	0.0180746	4.60011
Within Groups	103395.75	14	7385.4			
Total	156295.75	15				

At 0.05 level of significance and for degree of freedom of 1 and 14 the table value of F = 4.60011. Like that the Calculated value of F = 7.16277023. As the calculated value of F is more than the table F value, it can be stated that there is significant difference among the respondents with regard to the purpose of visit to library.

Table 4: Respondent's frequency of Library visit

Frequency	Students	Percentage
Every Day	184	43.8
Once in a week	72	17.1
Twice in a week	39	9.3
Thrice in a week	85	20.2
Occasionally	31	7.4
Very Rarely	9	2.1
Total	420	100

Source: Field survey.

Note: Figures in parenthesis denotes percentage to the total

Among various library visiting timings that is frequency of library visits in the study area it is noticed that, majority of the respondents visit library every day which is followed by the respondents who visit library thrice in a week as their percentage is accordingly around 43 and 20 percent which is followed by the respondents who visit library once in a week accounting for about 18 percent. The percentage of respondents who visit library twice in a week, occasionally and very rarely is very low which is below 10 percent. With regard to the respondents visiting

library every day, twice in a week, thrice in a week and very rarely the percentage of students is more than faculties and in rest of the frequencies the percentage of faculties is more than students. However, none of the faculties visit library very rarely. This indicates that majority of the respondents visit library very frequently.

Table 5: Respondent's time spending in the Library

Hours spent	Students	% age
Less than 1	222	52.9
1 – 2	160	38.1
2 – 3	28	6.7
More than 3	10	2.4
Total	420	100

Source: Field survey.
Note: Figures in parenthesis denotes percentage to the total

With regard to the time spend by the respondents in library, majority of the respondents spend less than an hour or spend in between 1 to 2 hours at library. The percentage of respondents who spend less than an hour in library is around 53 percent which accounts for about 59 percent of faculties and 53 percent of students. Like that those who spend in between 1 to 2 hours the percentage of faculties is about 36 and of students is about 38 percent as against to the overall percentage of 37.9 percent indicating that the percentage of faculties is more than student among those who spend less than an hour in library and the percentage of students is more than faculties those who spend in between 1 to 2 hours in library. The respondents spending in between 2 to 3 hours and more than 3 hours in the library are very low. It is below 7 percent. All this indicates that the time spend by the respondents in the library will be either less than one hour or two.

Table 6: Respondent's awareness about Reference Sources

Reference Sources	Students			
	Yes	**Percentage**	**No**	**Percentage**
Dictionaries	311	74.0	109	26.0
Encyclopedias	247	58.8	173	41.2
Directories	87	20.7	333	79.3
Year Books	194	46.2	226	53.8
Hand Books	219	52.1	201	47.9
Geographical Information Sources	52	12.4	368	87.6

Biographical Information Sources	101	24.0	319	76.0
Electronic Reference Sources	83	19.8	337	80.2
Books of Facts/Current Information Sources	205	48.8	215	51.2

Source: Field survey.
Note: Figures in parenthesis denotes percentage to the total

With respect to the awareness about reference sources among the respondents, from the survey in the study area, it is noticed that, about three forth of the respondents are aware about dictionaries followed by encyclopedias, handbooks and directories all which are above 50 percent. Like that with regard to the awareness among the respondents about geographical information sources, biographical information sources and electronic reference sources, the percentage of respondents is below one fourth that is below 25 percent. Except dictionaries and yearbooks the awareness of students in rest all reference source is more than faculties. The data in the above table indicates that among the respondents the awareness about dictionaries is more with respect to various reference sources available in the library.

Table 7: Respondents usage regarding sources of information in the Library

Information Sources	Students	Percentage
Books	387	92.1
Printed Journals	129	30.7
Electronic Journals	56	13.3
General Web Sources	142	33.8

Source: Field survey.
Note: Figures in parenthesis denotes percentage to the total

Mere collection of resources will not serve the purpose of the library users. The users who visit library should make use of the collection that exits in the library. From that point of view, from the survey it is found that the main purpose of all respondents to visit library is to use books. Very low percent of respondents say about one third of them visit library for the purpose of referring web sources followed by printed journals. This accounted for about 34 and 32 percent among total respondents where the percentage of faculties is more with respect to general web sources and the percent of students is more among those who referred printed journals. Though about 34 percent of the respondents referred general web sources in the library but their percentage in using electronic journals or referring electronic journals is very low which accounts for only about 13 percent and surprisingly the students refer more electronic journals than faculties do which indicates students are more familiar with electronic resources. On the

other hand there is a very low percentage of reference of general magazines, senior notes, etc., in the library from the respondents. Here it is interesting to note that none of the faculties refer senior notes or general magazines where students do for about 4 percent.

X^2 Analyses:

H_0: There is no significant difference regarding sources of information in the library among the respondents.

H_1: There is significant difference regarding sources of information in the library among the respondents.

Level of significance = 0.01 Degree of freedom = 1

Table X^2 value = 6.635 Calculated X^2 value = 0.0516232

The calculated X^2 value = 0.0516232 and the table X^2 value = 6.635. As the calculated X^2 value is less than the table X^2 value, null hypothesis is accepted and concluded that there is insignificant difference among the respondents regarding the perception with respect to the sources of information at their respective library.

Table 8: Respondent's satisfaction regarding Library collection

Collections	Students			
	Yes	Percentage	No	Percentage
Text Books	342	81.4	78	18.6
Reference Books	259	61.7	161	38.3
Periodicals/journals	247	58.8	173	41.2
Question Papers	332	79.0	88	21.0
Newspapers	322	76.7	98	23.3
Magazines	236	56.2	184	43.8
Electronic Resources	71	16.9	349	83.1
Scientific/ Technical Reports	102	24.3	318	75.7
Patents	96	22.9	324	77.1
Standards	98	23.3	322	76.7

Source: Field survey.

Note: Figures in parenthesis denotes percentage to the total

The success of any library depends upon the collection of resources in it. In the study area more than three fourth of the respondents are satisfied or happy with the collection of text books, question papers and newspapers which is followed by the collection of periodicals/ journals, reference books and magazines which accounts for about 60 percent of the respondents except for magazine which is only about 50 percent. With respect to the collection of electronic

resources, technical reports, patents and standards the respondents are very little satisfied or happy as their percentage with this respect is below one fourth of the total that is less than 25 percent. At the same time respondents are not at all satisfied with the collection of other relevant materials other than the above mentioned ones. This is because the level of happiness is only 3 percent. On the other hand regarding the collection of periodicals/ journals, newspapers, electronic resources, scientific or technical reports and other materials the percentage of faculties who are satisfied are more than students and in the remaining collections the percentage of students is more than faculties. Totally it can be concluded that respondents are only satisfied with the collection of text books, reference books, periodicals or journals, question papers and newspapers. This indicates that there is urgent need to concentrate on the collection of electronic resources, technical reports, patents and standard reports which are more essential and needs in present situation for students, faculties and research scholars.

ANOVA Analysis:

H_0: There is insignificant difference among the respondents regarding satisfaction with respect to the collections at their libraries.

H_1: There is significant difference among the respondents regarding satisfaction with respect to the collections at their libraries.

ANOVA Table						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	183552.8	1	183552.8	30.98362	2.77E-05	4.413873
Within Groups	106635.4	18	5924.189			
Total	290188.2	19				

As the calculated F value which is 30.98362 which is more than the table F value which is 4.413873, null hypothesis is rejected and alternative hypothesis is accepted. Therefore, it can be concluded that there exist significant difference with regard to the satisfaction of the respondents with respect to the collections at their library.

Table 9: Respondents preference regarding media of information resources in library

Media	Students	Percentage
Print Media	160	38.1
Electronic Media	149	35.5
Both	111	26.4
Total	420	100

Source: Field survey.

Note: Figures in parenthesis denotes percentage to the total

User can use print media or electronic media to access the required information. To access print media hard copy of the information is required and to access electronic media electronic devices are required. In the study area, there is a mixed preference with regard to the use of media of information resources in the library. The overall percent of the respondents using print media is about 38 percent, electronic media is about 36 percent and respondents using both are about 26 percent. Among them with respect to print media around 38 and 33 percent of them are students and faculties, in electronic media around 44 and 36 percent are faculties and students and among the respondents using both around 23 and 26 are faculties and students. This reveals that the respondents equally prefer both print media and electronic media.

Table 10 – A: Respondents satisfaction regarding access ofelectronic information sources in the library

Collections	Students			
	Yes	Percentage	No	Percentage
Audio/Video Cassettes	31	7.4	389	92.6
CD/DVDs	34	8.1	386	91.9
Internet & Online Resources	127	30.2	293	69.8

Source: Field survey.
Note: Figures in parenthesis denotes percentage to the total

It is studied that audio and video like cassettes, Compact Discs (CDs), digital versatile disks (DVDs) and internet are the some of the strongest electronic Medias which anybody normally come across. In the study area it is surveyed that majority of the respondents are not happy with the use of electronic sources available in their library. Among the available audio and video sources accessed by the respondents in the library, internet and online resources is accessed in more by the respondents that too only about 31 percent where the percentage of faculties is about 39 and that of students is about 30 percent indicating that faculties are more happy in accessing audio and video resources than students in their library. The percentage of respondents who are happy with the access of the audio or video cassettes and CD/ DVDs is very little accounting for only about 8 percent. Here the percentage of faculties is more than students with respect to the happiness in accessing audio/ video cassettes and the percentage of students is more with respect to the happiness in accessing CD/ DVDs in their library. All this indicates that still there is a long way to go in increasing the happiness of the respondents in accessing audio/ video information sources in their library.

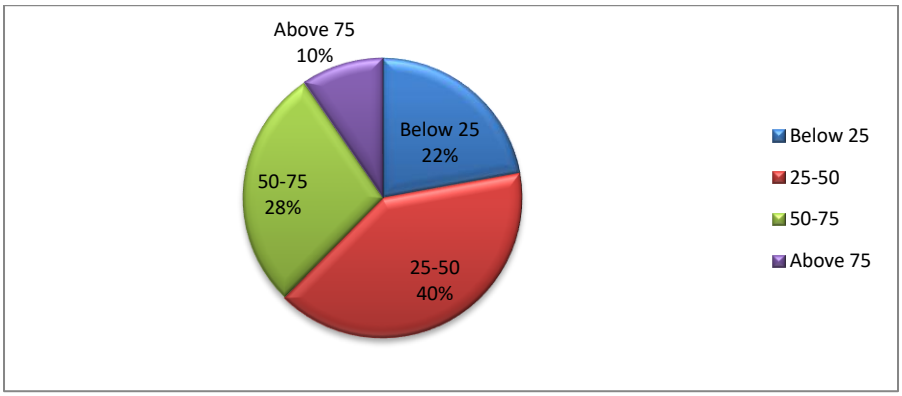
Table 10 – B: Respondents dependency on library sources

Dependency	Students	Percentage
Below 25	93	22.1
25 – 50	169	40.2
50 – 75	118	28.1
Above 75	40	9.5
Total	420	100

Source: Field survey.
Note: Figures in parenthesis denotes percentage to the total

It is studied that greater percentage of dependence is there on library sources which gives way to analyse to what extent the dependence of respondents is there on library sources. The above table clearly reveals the percentage of dependence of the respondents on the library sources. From the data in the above table it is clear that the dependence of respondents on library sources is less than 50 percent. In other words, about 64 percent of the respondents depend on library sources either less than 25 percent or in between 25 to 50 percent whose percentage is accordingly 24 and 40 percent. Very less respondents say about 27 percent depend on library sources for more than 50 percent but less than 75 percent and still less percent of the respondent that is only about 9 percent depend on library sources. All these indicate that the maximum dependence of respondents on library sources is within 50 percent and in certain cases up to 75 percent.

Graph 2: Column chart regarding respondent's dependency on library



Source: Table 12 – B

7. Findings

7.1 Majority 44 percent students visit the library daily to get their required information from the library.

7.2 53 percent students spend less than an hour in the library for satisfying their information needs.

7.3 70 percent students visit the library to borrow books from the library followed by 68 percent for referring the books and journals.

7.4 74 percent students are aware of dictionaries 59% aware of encyclopedias and 20 percent are aware of electronic resources available in their respective libraries.

7.5 Still 92 percent respondents refer/depend upon printed books for their information needs.

7.6 Only 30 percent students are happy with the internet and online resources available in their college libraries.

7.7 40 percent students are depended on 25 to 50% on their respective college libraries for their information requirements.

7.8 38 percent students prefer print and another 35 percent students gave their preference to electronic media and as their information sources in the library.

8. Suggestions by the Respondent's

8.1 It seems that, majority of the students visit the library to borrow library books and to read newspapers, since they are using their only for less than hour, librarian has to convert these students into a serious reader of the library by giving them attracting latest information on their subject.

8.2 Library orientation has to be conducted to convert another 30 percent students to make use of their college library by giving more importance to electronic sources and services.

8.3 Internet speed should be increased; more number of computers with internet connection in the library should be made available to students round the clock without any time restrictions.

9. Conclusion

Change is continuous in this information era, the library, librarian and its users has to change their mindset from using certain print resources to the electronic information resources, as it is easily available round the clock anywhere in the world, if you have internet connection. Now electronic information resources are very well suited for the students of the medical and allied colleges in particular and in the college libraries in general.

After analyzing the data the following conclusions are drawn.Libraries are changing; funding limits and users demands are transforming staffing patterns, service models, and access to resources and services to the users. Professional College libraries need to adapt to the changing profile of students in the medical education. Librarians should proactively conduct regularly training programmes to students and faculties about how to access and make use of the e-resources for their study purpose. So users can utilize the services of the library in full.

10. References:

10.1 Asemi, A. (2005). Information Searching Habits of Internet Users: A Case Study on the Medical Sciences University of Isfahan, Iran. *Webology, 2* (1).

10.2 Atlas, M. C., Garza, F., & Ren, H. (2007). Use of Laptop Computers in an Academic Medical Library. *Medical Reference Services Quarterly, 26* (2), 27-36.

10.3 Baruchson-Arbib, S., & Shor, F. (2002). Use of Electronic Information Sources by Israeli College Students. *Journal of Academic Librarianship, 28* (4), 255-257.

10.4 Biradar, B. S., & Maranna. O. (2011). Use of Electronic Resources and Services by Marine Scientists in South India. *Journal of Indian Library Association, 48* (1), 12-23.

10.5 Black, R., Harrison, J. M., Morris, D., Sara, B., Tod, Angela., & Wolstenholme, D. (2004). Nurses Use of the Internet in Clinical Ward Settings. *Journal of Advanced Nursing, 48* (2), 157-166.

10.6 Fatima, N., &Naved, A. (2008). Informaiton seeking behaviour of the students at Ajmal khan Tibbiya College. Aligarh Muslim University: A Survey. Annals of Library and Information Science Studies, *55* (1), 141-144.

10.7 Lorence, D., & Park, H. (2007). Gender and Online Health Information: A Partitioned Technology Assessment. *Health Information and Libraries Journal, 24* (3), 204-209.

10.8 Pattanaik, B., & Pattanaik, B. B. (2011). E - Information Search Strategy by Faculty of Science Department, North Orissa University: A Case Study. *International Journal of Digital Library Services, 1* (2), 10-20.

10.9 Sherry, S. S. (2006). Information Behaviour of Health Professionals . *Journal of Library and Information Science, 32* (2), 32-41.

10.10 Sood, R., & Adkoli, B. V. (2000). Medical Education in India - Problems and Prospects. *Indian Academy of Clinical Medicine Journal, 1* (3), 13-15.

10.11 Zhang, Y. (2001). Scholarly Use of Internet based Electronic Resources. *Journal of the American Society for Information Science and Technology, 52* (8), 628-654.