

A Survey on the Use of Library Resources, Services and Facilities: A Case Study at the Faculty of Medicine and Health Sciences, Universiti Putra Malaysia

Mohd Dasuki bin Sahak

Perpustakaan Sultan Abdul Samad

Universiti Putra Malaysia

Selangor, MALAYSIA

dasuki@lib.upm.edu.my

&

Mohd Sharif Mohd Saad

Faculty of Information Management,

Universiti Teknologi MARA, MALAYSIA

mohd.sharif@gmail.com

Abstract: *This study investigates the usage of library resources, services and facilities among first and third year medical students in the Faculty of Medicine and Health Sciences (FPSK), Universiti Putra Malaysia (UPM). The study attempts to identify the usage of library services, resources and facilities. Questionnaire employed in this study was based on the previous works that measures the frequency of usage of library resources, services and facilities in the library by daily, weekly, monthly, once per semester or never. With regards to the library usage all respondents, 205(100%) claimed that they visited the library to study and use the Internet. They also frequented the library to do their assignments 199 (97.1%); discussions with friends 176 (85.9%) and for leisure reading 192(93.7%). For resources, the Internet was rank first, second the newspaper, and the third are library websites. This is followed by library online database, dictionaries, handbooks and textbooks. The less frequently used resources are library OPAC, project paper, EZ-Proxy, Full text journal, encyclopedia, thesis and statistical reports. For frequency usage of library facilities the computer is rank first, followed by the reading area. The third is facilities which include discussion room, then the rest such as prayer room, printing, photocopy and self check machine.*

Keywords: *Library Use, Medical Library, Medical Students*

INTRODUCTION

The rapid proliferation of information in the present era has important implications for the education of health professionals including medical students. Information is an important tool used in the realization of any objective or goal set by an individual or group. It is valuable resources required in any society, thus acquiring

and using information are critical and important activities. (Ajayi, 2004). In order to develop effective collection and services, libraries need to study the usage of library resources and services among users. Fabunmi (2004) described library effectiveness as including information customized to meet individual needs. Studies on library usage in facilitating learning have acknowledged that academic libraries play a vital role among students by providing services, information resources and facilities. Wilson (2000) stated that the origins of human information seeking behavior are found in work on the users of libraries and in readership studies in general. The quest to know about the type of materials preferred by users is an important factor to determine and satisfy their information needs.

Wilson and Allen (1999) listed the specific user related characteristics or variables that have been measured include frequency of library/ information use, reasons for use, types of library/information use, attitudes and opinions regarding libraries, reading patterns, level of satisfaction, demographic data, personality, lifestyle and awareness of library services. Medicine is among of the sciences field in which the expansion of information is enormous and critically dependent on up-to-date information. Graves and Seliq (1986) emphasized on the importance of the medical library's role in developing lifelong learning skills among medical students. They pointed out that "students need to develop skills in information management and in the use of information tools and database." Students often do not comprehend the necessity of learning to use the library resources available to them, nor do they realize that research skills will be a necessary part of their future practice in the medical profession.

BACKGROUND

Reitz (2004) defined medical library as a type of special library maintained by a university medical school, hospital, medical research institute, public health agency, or medical association to serve the information needs of students, researchers and practitioners in the health sciences such as medicine, nursing , dentistry and pharmacy with collection that include print and online resources. The Medicine and Health Sciences Library (MHSL), Universiti Putra Malaysia, established in 1998 is a branch library of Perpustakaan Sultan Abdul Samad (PSAS). In 2006, the library was transferred into the complex of Faculty of Medicine and Health Sciences. The Library is situated in the nucleus of the faculty academic complex and easily accessible by students and lecturers. The library comprises of one block consisting of two floors, with a capacity of 200 setting with 25,000 volume of printed collections. Information on collections can be accessed from the Virtua Web OPAC through PSAS website.

MHSL is also equipped with WiFi internet facilities thus enabling students to access into the Virtua Web OPAC site within the reachable area of the library building using their own mobile computer or laptop.

Medical Library resources are regarded as the “heart” of the faculty to achieve the mission of the Faculty of Medical and Health Sciences by providing library resources and services to the faculty’s population such as the undergraduate students, post graduate students, lecturers, research officers, research assistants, science officers, and supporting staff. Undergraduates medical students under the Doctor of Medicine Programme are required to complete a 5 years programme of study with one year of foundation studies. Until July 2009, there are 592 medical undergraduate medical students in the Faculty of Medical and Health Sciences.

LITERATURE REVIEW

A survey by Pelzer et al. (1998) among veterinary medical students in the University of Iowa measured the frequency of usage of information resources by daily, 2-4 times per week, once per week, less or none. Similarly, study by Martin (2003) also measured the frequency of usage information resources among medical students. Renwick (2004) studied the knowledge and use of electronic information resources by medical sciences faculty at the University of the West Indies. This study measured the frequency of usage of electronic resources. Most of previous studies identified books and textbooks as commonly used by the students as sources for their study (Adedibua and Gboyega, 1997; Fidzani,1998; Clougherty et al.,1998; Okiy,2000; Zawawi and Majid, 2001; Majid and Ai, 2002; Dee and Stanley, 2005; Ajiboye and Tella , 2007 and Popoola, 2008). Most of previous works measured the frequency of library usage and information resources by time period of time such as daily, weekly, monthly, once a semester and never. (Pelzer et al., 1998; Martin, 2003; Renwick, 2004; Dee and Stanley, 2005; Wallis, 2006 and Hider and Coughlan, 2009).

The survey by Clougherty et al. (1998) on library services determined that students primarily turned to library staff for assistance, but they also sought help from each other. Study conducted by Popoola (2000) found that the librarians are major source used by the faculty members to know about the availability of library information products and services. Moreover, longitudinal study of undergraduates’ academic library experiences by Whitmire (2001) indicated that students used Reference Services to get assistance finding information materials. Numerous studies have identified that journals are commonly referred by the students in the course of doing their assignments, project papers and research (Clougherty et al,1998; Fidzani,1998; Okiy, 2000; Zawawi and Majid, 2001; Ajiboye and Tella , 2007; and Popoola, 2008). Library was most frequently used as a place for studying by the

library users (Pelzer et. Al, 1988; Whitmire 2001). Callinan (2005) found that the main reason for visiting the university library by students is the purpose of study.

Most of the students in the university used computers as a tool to access information resources. Studies by Martin (2003) found that many students used PCs to access e-mail. Students rely heavily on PCs for essay writing, presentations, data analysis, information searching and to communicate. Study by Licea de Arenas et al (2004) found that most of students in the University of Murica, Mexico (36.64%) and National University of Mexico (36.69%) use computer several times a week to doing assignments. Studies by Sherina et al. (2009) on computer proficiency among Medical Students in the Faculty of Medicine and Health Sciences found that medical students are knowledgeable and have the skills in information technology and computers and 82.90% believed that information and communication technology and computers skills are important for doctors. The internet is the most frequent information sources that are used by the students (Pelzer et al., 1998; Majid & Ai, 2002; Mittermeyer, 2003; Kerins et al., 2004; Wallis, 2006; Ajiboye & Tella, 2007).

METHODOLOGY

The research design for this study is based on the literature review and research objectives. The goal of this study is to acquire quantitative information by distributing questionnaire among the students in order to examine and determine which library services, resources and facilities are frequently used by medical students. Quantitative research for this study is based on the previous works that measure the frequency of usage information resources in the library by daily, weekly, monthly, once per semester or never (Pelzer et al., 1998; Martin, 2003; Renwick, 2004; Dee & Stanley, 2005; Wallis, 2006; Hider & Coughlan, 2009). This measurement is regarded as more accurate in evaluating the frequency of the use of library services, resources and facilities among students. A quantitative research approach is chosen in this study because it is easy to code the collected data numerically. This metric measure and calculate the frequency by time period of frequency. Independent variables identified from previous work that are similar with this research are student's demography, library services, resources and facilities, while the dependent variable on this study is the library usage.

Data collection was conducted in November 2009 until April 2010. The respondents were students at the Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. Students from year 1 and year 3 of medical students were chosen as respondents for this research. There were 127 medical students in the year 1 and 113 medical students in the year 3 of the Faculty of Medicine and Health Sciences. The reason for choosing the two (2) groups of students was to enable comparison be made on the usage of library services, sources and facilities between two

groups of students, junior and senior. During the data collection only first and third year students are available on campus while students in year 2 were having their semester break, and year 4, and 5 students were doing clinical training in the hospital.

Demographic Information

Table 1 presents data finding for respondents' background information. A total of 240 of the questionnaire were distributed, 205 (85.40%) were completed and used for the data analysis. Data was analyzed using descriptive statistic and percentage tabulation.

Table 1: Gender and Year of Study

Medical Respondents by Year	Numbers of Medical Students	Gender	
		Male	Female
Year 1	106 (51.70%)	52 (%)	54 (%)
Year 3	99 (48.3%)	42 (%)	57 (%)
Total	205	94 (45.90%)	111 (64.70%)

From the total of 205 respondents, 106 (51.70%) were first year medical students and 99 (48.3%) were third year medical students. 111 (64.7%) were female respondents and 95 (45.9%) were male respondents. It was found that the number female respondents is higher than male respondents.

Usage of the Library

All of the respondents, 205(100%) claimed that the purpose they visited the library were to study and use the Internet. Apart from this it is interesting to note that they also frequented the library to do their assignments 199(97.1%); discussions with friends 176 (85.9%) and for leisure reading 192(93.7%). The study by Ajayi (2004) found that medical students preferred to use the library as leisure reading. However, a study by Callinan (2005) indicated that the undergraduate biology students did not prefer to use the library as a place for leisure reading. Overall, the result supported the findings cited in other studies where undergraduates' usually use library as a place for study (Wei, 1995; Whitmire, 2001; Ajayi, 2004; Callinan, 2005) and Martin (2003).

Use of the Reference Collection (resources)

The reference collection/resources are the pride and regarded as the back bone of any library. With a portion of the library budget used to furnish the collection it is very crucial that they are being fully utilized by the users. The respondents were asked the frequency of use of the reference collection available in the MHSL. The questionnaire use the scale of 2 to 5, that is; *identify the usage of the library collection by daily, weekly, monthly, once in a semester and lastly never use*. Data value in SPSS for this answer are daily as equivalent to 5, weekly equivalent to 4, monthly as equivalent to 3, once in a month as equivalent to 2 and never use as equivalent to 1.

Table 2: Frequency Usage of Library Collections (n=205)

Library Resources	% Never used	% Once a Semester	% Monthly	% Weekly	% Daily	Rank
Internet				9.3	90.7	1
Newspaper			14.1	51.7	34.1	2
Library Websites			22.9	50.2	26.8	3
Library Online Database	2.9	17.1	30.7	46.8	2.4	4
Dictionaries		26.3	34.1	33.7	5.9	5
Handbooks		13.2	60	26.8		6
Textbooks		14.1	64.9	21		7
Library OPAC		30.7	40.5	28.8		8
Project Paper		45.9	41.5	12.7		9
EZ-Proxy	6.3	55.6	34.6	3.4		10
Full Text Journal	7.8	53.2	37.1	2		11
Encyclopedia	15	42	40.5	2.9		12
Thesis	47	26.3	22	4.9		13
Printed Journal	43	38	13.7	5.4		14
Statistical Reports	57	23.9	13.7	5.9		15

As seen in table 2, the first rank is internet, second is newspaper, and the third are library websites. These items are being categorized as the most frequently used. While, the moderate frequently used are library online database, dictionaries, handbooks and textbooks. Finally the less frequently used are library OPAC, project papers, EZ-Proxy, Full text journals, encyclopedias, thesis and statistical reports.

Students commonly used internet as their information source. Internet services are provided in the training room MHSL. The results indicated that 90.70% of the respondents used Internet daily and 9.30% weekly. The results indicated that most of the respondents frequently used the internet weekly and on a monthly basic. The finding is consistent to a study carried out by Ajayi (2004) who found that most medical students used internet at least once in a week. Overall, the finding is identical to several other research where internet rank as the number one information source (Rankin, 1992; Majid & Ai, 2002; Callinan, 2005).

It was also found that half of the students read newspaper weekly with the percentage of 51.70%. Meanwhile, only 34.10% of the respondents read newspaper daily and 14.10% monthly. It was found that 50.20 % respondents used library websites weekly, 26.80% daily and 22.90% monthly. The results indicate that most of respondents' did not frequently used thesis. 56.0% respondents never used the statistical reports, 23.90% once a semester, 13.70% monthly and 5.9% weekly. The results indicated that most of respondents' were not frequent user of the statistical reports available in the MHSL. 23.9% used them once in a semester; only 5.9% used them weekly.

Usage of Library Facilities

Table 3 showed the percentage of the frequency usage of library facilities such as computers, reading area, discussion room, printing, photocopying and others. The first rank of frequency of usage of library facilities was the computer and followed by the reading area. The third was discussion room, then the rest were such as prayer room, printing, photocopy and self check machine. From the percentages these items were considered as less frequently used. 58% respondents used reading area by weekly, 37.60% monthly and 4.40% daily. The results indicate that most of respondents' frequently use reading area weekly and monthly.

Table 3: Frequency Usage Library Facilities (n=205)

Library Facilities	% Never used	% Once a Semester	% Monthly	% Weekly	% Daily	Rank
Computer			22.4	64.4	13.2	1
Reading Area			37.6	58	4.4	2
Discussion Room		27.8	61	11.2		3
Prayer Room	45	10.2	35.6	8.8		4
Printing	61	27.3	9.8	2.4		5
Photocopy	63	26.3	7.8	2.4		6
Self Check Machine	98	2.4				7
Library OPAC		30.7	40.5	28.8		8
Project Paper		45.9	41.5	12.7		9
EZ-Proxy	6.3	55.6	34.6	3.4		10
Full Text Journal	7.8	53.2	37.1	2		11
Encyclopedia	15	42	40.5	2.9		12
Thesis	47	26.3	22	4.9		13
Printed Journal	43	38	13.7	5.4		14
Statistical Reports	57	23.9	13.7	5.9		15

Data in table 3 revealed that 100% respondents used computer facilities in the library to complete their tasks. The table indicated that 64.40% of the respondents used the computer room weekly, 22.40% monthly and 13.20% daily. This supports a study by Martin (2003) who indicated that medical students used computer daily in the library. It is found that 61% respondents never used the printing services. Only 27.30% used it once a semester, 9.80% monthly and 2.40% weekly. Nevertheless, a study by Martin (2003) revealed that medical students used printing services occasionally. For the photocopy services 63.40% of the respondents never used the service. 26.30% used the service once in a semester, 7.80% monthly and 2.40% weekly. On the other hand, a study by Ajayi (2004) and Martin (2003) found that most medical students used photocopier facility weekly. The study also discovered that 97.60% of the respondents never use the self check machine with only 2.40% use it once in a semester.

Comparison of Usage of Library's Facilities and Services between the First and Third year students

Table 4 showed in percentage the difference in usage of library services and facilities between first and third year students. The findings revealed that the year of study and courses undertaken by students do influence the usage of the library. More third year students asked library staff, used journal articles and library online databases when compared to the first year students due to excessive loads of assignments.

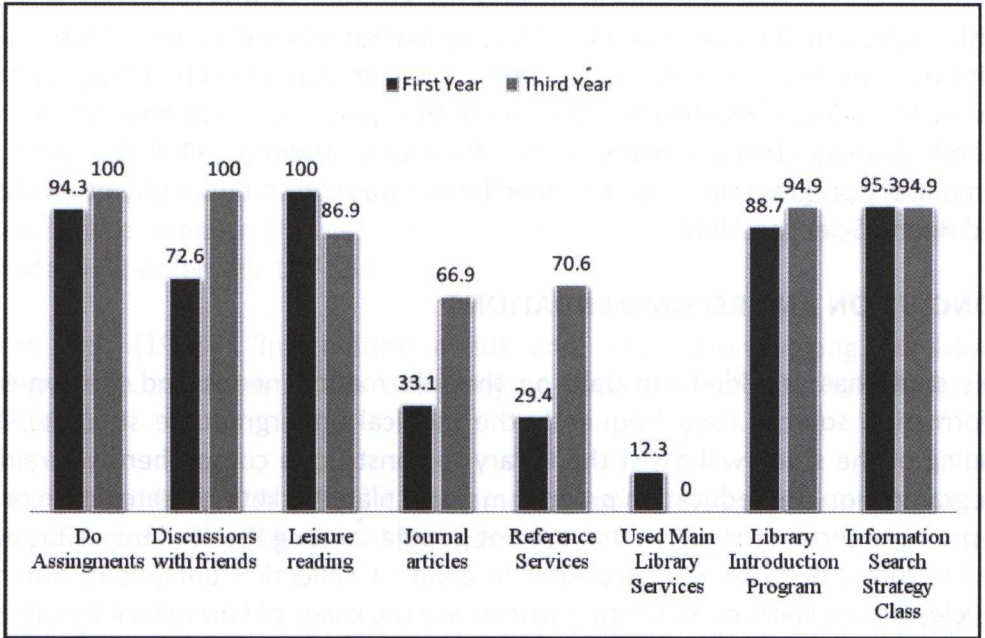


Figure 1: Usage of library's Facilities and Services Between the First and Third Year Students.

The findings also showed that more third year students (100%) used medical library as a place to do their assignments than first year students (94.30%). These results are similar with the study carried out by Callinan (2005). However, the study by Whitemire (2001) found that first year respondents used the library more than the third year students. It was also found that more third year students (100%) used medical library for discussions than the first year students (72.60%). However more first year students (100%) used the library as a place for leisure reading than third year students (86.90%). This finding is similar with the study by Callinan (2005). More third year students (66.90%) seemed to use journal articles than first year students (33.10%). This finding is similar with the study carried out by Callinan (2005) where the final year respondents were found to use journals more than the first year.

In relation to this, a study by Martin (2003) found that Graduates Entry Programme used journals more than the first year medical respondents. The findings indicated that more third year students (70.60%) used reference services compared to the first year students (29.40 %.) This result confirmed the study by Callinan (2005) who claimed that the final year students were more likely to ask the library staff than the first year respondents. However, the study conducted by Whitemire (2001) found that the third year students were more likely to request for assistance from the library staff compared to the first year students. The study also discovered that only first year students (12.30%) visited the main library.

With regards to the information skills programmes offered by the library, more third year students (94.90%) participated in the Library Introduction Program than first year students (88.70%) however more first year (95.3%) attend Information Search Strategy Class compared to the third year students (94.90%). These are compulsory programmes to be attended by the students at the Faculty of Medicine and Health Sciences, UPM.

CONCLUSION AND RECOMMENDATIONS

This study has provided the data on the information needs and the types of information sources used frequently by the medical undergraduate students. The finding of the study will assist the library to construct a comprehensive training programme on user education programme, and plan marketing strategies in order to promote certain resources that are not popular among the students. Librarians and lecturers need to work together to conduct collection analysis in order to develop library collections. In order to increase the usage of library facilities, library should provide and allocate more discussion rooms to fulfill the user needs. The library should also promote the reference service and collection during the library introduction and information skills programmes. Special classes on information skills should be conducted for students who have missed out.

BIBLIOGRAPHY

- Adedibua, L. O. & Gboyega, A.(1997). Information needs and information seeking patterns of medical students at Lautech, Ogbomoso. *Aslib Proceedings*, 49 (9): 238-242.
- Ajayi, N.A.(2004). Library use and information-Seeking Behaviour of Medical Students. *Anthropologists*, 6 (3): 209-213.
- Ajiboye, J.O. and Tella, A. (2007). University undergraduate students' information seeking behaviour: Implications for Quality In Higher Education In Africa.

The Turkish Online Journal of Educational Technology, 6, (1): 40-52.

- Clougherty, L. et al., (1998), "The University of Iowa Libraries' undergraduate user needs assessment". *College and Research Libraries*, 59 (6): 572-84.
- Callinan, J. E. (2005). Information-seeking behaviour of undergraduate biology students: A comparative analysis of first year and final year students in University College Dublin. *Library Review*, 54 (2): 86-99.
- Dee, C & Stanley E. (2005). Information-seeking behavior of nursing students and clinical nurses: Implications for health sciences librarians. *Journal of the Medical Library Association*, 98 (2): 213-222.
- Fabunmi, B.A. (2004). Planning the university libraries for effective customer services in Nigeria. In Madu, E.C. (Ed.), *Technology for information management and service: Modern libraries and information centers on developing countries*. Ibadan: Evi-Coleman: 147-158.
- Fidzani, B.T. (1998), "Information needs and information-seeking behaviour of graduate students at the University of Botswana", *Library Review*, 47(7): 329-340.
- Graves, K.J and Seliq, S.A. (1986). Library instruction for medical students. *Bulletin Medical Library Association*, 74 (2): 126-130.
- Hirder, P. and Coughlan, E. (2009). The information-seeking behavior of clinical staff in a large health care organization. *Journal Medical Library Association*, 97(1): 47-50.
- Holladay, Sherry J. (2005). "Sampling." *Encyclopedia of Public Relations*. Ed. Robert L. Heath. Vol. 2. Thousand Oaks, CA: Sage Reference, 763-765.
- Kerins, G., Madden, R. & Fulton, C. (2004), "Information-seeking and students studying for professional careers: the cases of engineering and law students in Ireland", *Information Research*, 10 (1), paper 208. Retrieved on September 7, 2010 from <http://InformationR.net/ir/10-1/paper208.html>
- Licea de Arenas, J., Vicente Rodriguez, J., Gomez, Antonio J., & Arenas, M. (2004). Information literacy: Implications for Mexican and Spanish university students. *Library Review*, 53(9): 451-460.

- Majid, S. & Ai, T.T. (2002), Usage of information resources by computer engineering students: A case study of Nanyang Technological University, Singapore, *Online Information Review*, 26 (5): 318-325.
- Martin, S. (2003). Impact of a Graduate Entry Programme on a Medical School Library service. *Health Information and Libraries Journal*, 20: 42-49.
- Mittermeyer, D. (2003), "Information literacy: study of incoming first year undergraduates in Quebec", paper presented at the Conference of Rectors and Principals of Quebec Universities, Montré'al. Retrieved on 18th November, 2004 from http://crepuq.qc.ca/documents/bibl/formation/studies_Ang.pdf
- Okiy, R.B. 2000. Assessing students and faculty use of academic libraries: The case of Delta State University Library, Abraka. *Nigerian Journal of Library and Information Service*, 4: 52-60.
- Pelzer, N.L., Leysen, J.M., Parks, W.R, and Parks, E.S.(1988), "Library use and information-seeking behaviour of veterinary medical students", *Bulletin of the Medical Library Association*, 76 (4): 328-353.
- Polyakov A, Palmer E, Devitt PG & Coventry BJ. (2000). Clinicians and computers: friends or foes?. *Teaching and Learning in Medicine*, 12 (2):91-95.
- Popoola, S.O. 2000. The use of information products and services in social science research in Nigerian universities. *African Journal for the Psychological study of Social Issues*, 5 (2): 296-308.
- Popoola, S.O. (2008). Faculty Awareness and Use of Library Information Products and Services in Nigerian Universities. *Malaysian Journal of Library & Information Science*, 13(1): 91-102.
- Reitz (2004). *ODLIS-Online dictionary for library and information science*. Ports: Libraries Unlimited. Retrieved on May 5, 2001 from http://lu.com/odlis/odlis_1.cfm
- Renwick, S. (2005). Knowledge and use of electronic information resources by medical sciences faculty at the University of the West Indies. *Journal of the Medical Library Association*, 93(1): 21-31.
- Sherina Mohd Sidik, Mohd Yunus, Azlan Hamzah and Azhar Md Zain.(2009). Computer aided learning knowledge among medical students in the Faculty of Medicine and Health Sciences, Universiti Putera Malaysia. *Malaysian Journal of Medicine and Health Sciences*, 5(1): 49-57.

- Wallis, L.C. (2006). Information seeking behavior of faculty in one school of public health. *Journal of the Medical Library Association*, 94 (4): 442-446.
- Whitmire, E. (2001). "The relationship between undergraduates' background characteristics and college experiences and their academic library use." *College and Research Libraries*, 62(6): 528-540.
- Wilson, T. & Allen, D. (1999). Exploring the Contexts of Information Behaviour. Proceedings of the Second International Conference on Research in Information Needs, Seeking and Use in Different Contexts, Sheffield 13-15 August 1998. Taylor Graham.
- Whitmire, E. (2001). "The relationship between undergraduates' background characteristics and college experiences and their academic library use." *College and Research Libraries*, 62(6): 528-540.
- Wilson, T.D. (2000). Human information behavior. *Information Sciences Research*, 3(2): 49-55.
- Zawawi & Majid. (2001) . The information needs and seeking behaviour of the IMR biomedical scientists, *Malaysian Journal of Library & Information Science*, 1: 25-41.