User satisfaction with information searching and library services among medical professional in Malaysia

Nurul Azurah Mohd Roni¹, Hasliza Ali¹, Wan Emilin Wan Mat Alli¹, Engku Razifah Engku Chik¹ and Siti Azrin Abdul Hamid²

¹Universiti Sains Malaysia
Perpustakaan Hamdan Tahir, USM Health Campus
Kubang Kerian, Kota Bharu, Kelantan, MALAYSIA

²Universiti Sains Malaysia
School of Medical Sciences, USM Health Campus
Kubang Kerian, Kota Bharu, Kelantan, MALAYSIA
e-mail: azurah@usm.my; haslizali@usm.my; emilin@usm.my; razifah@usm.my;
ctazrin@usm.my

ABSTRACT

The library is one of the supporting departments of an institution in providing various information resources and services to their users. Since users are the key person to the library, therefore, it is important to make them satisfied with the library services. The study aimed to determine the satisfaction level towards the searching information and library services among medical professionals in Malaysia. A survey method was conducted among 336 medical professionals in twenty medical institutions with libraries throughout Malaysia from November 2016 until April 2017. The respondents comprised of medical officers, medical lecturers and postgraduate medical students. Only medical practitioners who are legitimately registered with Malaysian Medical Council and under professional training in the university were included in the study. The respondents were excluded if they were public members, general practitioners and dental practitioners. Questionnaires were distributed to the respondents in respective institutions. Descriptive analysis was used to report the results. The mean (standard deviation) age of the respondents was 36.42 (7.98) years with the age range between 24 and 71 years old. Majority of the respondents were Malay (72.5%), female (61.3%) and had a Bachelor degree of education (52.4%). Most of them claimed that they not encountered any difficulty using the library services (78.7%) and they found the needed information in the library (81.4%). Among the sources of information in the library, the respondents were very satisfied with surfing the internet (35.9%). In response of satisfaction towards library services, the majority of respondents were very satisfied with services provided by the librarians in answering specific queries (97.9%).

Keywords: Satisfaction; Library services; Information searching; Medical professional

INTRODUCTION

The library acts as one of the supporting departments of an institution since it provides the services and information needed to its students and staff (Padmavathi, Ningaiah, and Biradar 2017). Particularly, in the academic library, there is a responsibility to preserve scholarly communication as well as the primary resources (Ahmad, Romle, and Mansor 2015).

User satisfaction was based on the quality of services provided by the library. The quality in the library sector is outlined as permanent user satisfaction and based on the customers' perspectives. Only users who regard the services as being of high quality from their subjective point of view will remain a satisfied library user in the long run (Ahmad, Romle, and Mansor 2015).

The inability to recognize the specific use of a library's services due to the development of new technologies and problem to access information sources contribute to user dissatisfaction towards library services (Kassim 2017). Hence, library managers need to find a better way to enhance the quality of the library service and user satisfaction to maintain the users' loyalty. The library should implement a more strategic approach since the creation and delivery of service satisfaction for their users play an important role in the library's existence (Padmavathi, Ningaiah, and Biradar 2017).

Satisfaction studies are mainly based on users. Thus, understanding user needs is important in providing information services in the library. Relatively, it is imperative to focus on the users and make them satisfied with the services. Hence, the present study aimed to determine the satisfaction level towards the searching information and library services among medical professionals in Malaysia.

It is realized that medical librarians need to clearly understand the medical community's level of awareness of information resources and services available through the library. Adequate understanding of the information needs and information-seeking behaviour among medical professionals is also necessary for proper planning and improved collection building, as well as the formulation of value-added services and facilities of medical libraries. Henceforth, it would be important and appropriate to study information seeking behaviour among medical professionals in Malaysia.

OBJECTIVES

The objectives of the study are:

- a. To ascertain the characteristics of medical professionals attending the libraries to search for information
- b. To determine their level of satisfaction towards library services
- c. To verify their satisfaction level in searching information

RESEARCH DESIGN

A cross-sectional study was conducted among 336 medical professionals in twenty medical institutions throughout Malaysia from November 2016 until April 2017. The twenty institutions consisted of four research universities, eight non-research universities and eight private universities.

Table 1: List of institutions and population numbers

No.	INSTITUTION	TYPES	TOTAL MEDICAL PROFESSIONAL
1	UKM	Research University (RU)	356
2	UPM	Research University (RU)	286
3	USM	Research University (RU) 484	
4	UM	Research University (RU)	450
5	IMU	Public University (Non-RU)	48
6	UIA	Public University (Non-RU)	100
7	UiTM	Public University (Non RU)	148
8	UMS	Public University (Non-RU)	66
9	UNIMAS	Public University (Non RU)	56
10	UniSZA	Public University (Non RU)	68
11	UPNM	Public University (Non-RU)	55
12	USIM	Public University (Non-RU)	83
13	AIMST	Private University	28
14	Cyberjaya	Private University	55
15	IJN	Private University	80
16	IMR	Private University	100
17	MSU	Private University	45
18	Newcastle	Private University	48
19	PU	Private University	52
20	USCI	Private University	40
TOTA	L		2,648

For this study, an estimated number of 2,648 medical professionals are identified as a possible population. Raosoft Sample Size Calculator (http://www.raosoft.com/samplesize.html) was used to calculate the minimum recommended sample size. Using a 5% margin of error and a confidence level of 95%, it is recommended that this study has a minimum of 336 respondents in order to get the critical value for normal distribution.

The respondents at the respective institutions were selected based on simple random sampling. The respondents comprised of medical officers, medical lecturers and postgraduate medical students. Only medical professionals who are legitimately registered with the Malaysian Medical Council (MMC) and under professional training in

the university were included whereas public members, general practitioners and dental practitioners were excluded from the study.

The librarians at the selected institutions distributed the questionnaires to the respondents based on predetermined selection criteria. Detailed information of the study was provided in respondents' information sheet. Eligible respondents who voluntarily entered the study were requested to fill in an informed consent form and signed it. The respondents took 10 to 15 minutes to answer all the questions. Once completed, the questionnaires were collected and submitted to the researchers. All information was kept confidential and individual data had no identification of the respondents. The questionnaire was divided into four sections: section A detailed on demographic profiles, section B investigated on information and research needs, section C on methods for acquiring needed information and section D on satisfaction with information services.

Data entry and analysis were conducted using the IBM Statistical Package and Social Sciences (SPSS) version 24. Descriptive statistics were applied to present the findings. For numerical data, results were presented by the mean and standard deviation (SD) for normally distributed variables, median and interquartile range (IQR) for skewed data. For categorical data, frequency and percentage were applied.

RESULTS

The sociodemographic profile of 336 medical professionals was summarised in Table 2. The mean (SD) age of the respondents was 36.42 (7.98) years with the age range between 24 and 71 years old. Majority of the respondents were Malay (72.5%), female (61.3%) and had a bachelor degree of education (52.4%). Out of 336, 161 (48.6%) were medical officers, 121 (36.6%) were medical lecturers and the rest were postgraduate medical students (14.8). The highest number of respondents is from research universities with 52.7%, followed by public universities in 30.1% and private universities in 17.3%.

Table 2: Profile of medical professional (n=336)

	Frequency (%)	
Age (years)*	36.42 (7.98)	
Gender		
Male	129 (38.7)	
Female	204 (61.3)	
Ethnicity		
Malay	243 (72.5)	
Chinese	45 (13.4)	
Indian	34 (10.1)	
Other	13 (4.0)	

Academic Qualification		
Bachelor	175 (52.4)	
Master	135 (40.4)	
Doctorate	24 (7.2)	
Job Position		
Medical officer	161 (48.6)	
Lecturer	121 (36.6)	
Postgraduate student	49 (14.8)	
Length of working (years)*	5.94 (5.36)	
Institution		
Research University	177 (52.7)	
Public University	101 (30.1)	
Private University	58 (17.3)	

(a) Characteristics of medical professional attending the library (n=336)

As shown in Table 3, the majority of respondents (55.7%) visited the library in the afternoon, followed by those who came in the morning with 46.7% respondent and 38.7% visited the library at night. Most of them claimed that they did not encounter any difficulty using the library services (78.7%) and they found the needed information (81.4%). However, among the respondent who encountered the difficulty using library services (21.1%), they indicated that collection and technical were the type of difficulty they encountered when using the library services.

Findings revealed that the majority of the respondents visited the library in the afternoon. Besides, 3.8% of the respondents visited the libraries every day, 22.5% visited the library once a week, 37.5% visited the library once in a month and 4.1% of the respondents had never visited the library at all. The lower number of respondents visited the library building due to job requirement as medical practitioners, as well as the development of new technology, databases and more innovative systems to access the information through any hand-held devices.

Table 3: Characteristics of attending the library among medical professional (n=336)

	Frequency (%)
Time visiting library	
Morning	157 (46.7)
Afternoon	187 (55.7)
Night	130 (38.7)
Find the material needed	
No	62 (18.6)

Yes	272 (81.4)			
Encounter difficulty using library				
No	263 (78.7)			
Yes	71 (21.3)			
Type of difficulty using library				
Collection	45 (63.4)			
Technical	33 (46.5)			
Facilities	12 (16.9)			
Library staff	5 (7.0)			
Services	3 (4.2)			
Frequency visiting library				
Never	13 (4.1)			
Once a month	120 (37.5)			
Once a week	72 (22.5)			
Few times a week	76 (23.8)			
Everyday	12 (3.8)			
Others	27 (8.3)			

(b) Level of Satisfaction in searching the information

Table 4 summarised the satisfaction level in searching the information. Each item needed a response based on a measure from a five-point Likert scale, where "1=very dissatisfied" to "5=very satisfied" (Brown 2010). Among the stated sources of information in the questionnaire, the respondents were very satisfied with surfing the internet (35.9%) for searching purpose.

The respondents were very satisfied with surfing the internet to search for information. Previous literature highlighted that the Internet is mostly used in searching reliable information on a specific issue due to the diversity, tremendous and huge volume of information contained (Chen et al. 1998). Dike (2000) indicated that instant access to information from a multiplicity of choices was one of the reasons why users prefer digital technology (Dike 2000).

Furthermore, most institutions provide free internet connection where the respondents can access the internet in the easiest way, similar to the previous studies which indicated that their respondents were using the internet often since all faculties in their organizations provided internet connection. The respondents searched for the information through the internet since the university library had provided access to various databases and online journals for all the students and staff (Asemi 2005).

Sivaraj and Esmail (2007) studied on the use of the internet and the result found that the internet is being used by the respondents to collect a variety of information and gain

more knowledge as part of their learning, teaching and research activities (Sivaraj and Esmail 2007). Other studies also found that the respondents used the internet to access online journals, teaching materials and dissertations, as well as for communication through e-mail and other tools (Attama 2005, Lal et al. 2006, Mutula 2003, Ohakwe and Okwuanaso 2004). The respondents did not only use the Internet to search for materials resources but also used it to collect resources to supplement curricular offering (Adomi, Okiy, and Ruteyan 2003).

Besides, the library users in the current study were also satisfied with the independent search at the library. Using suitable sources to search for the information in the library helped the respondents to strengthen the quality of their work. The library provided various choices and easier for the users to search the information such as textbooks, hardbound theses, newspaper, e-books and others. They also can ask the librarian to get interlibrary loan services if the needed books were not available in their library. Now, it becomes easier for the users to search the information since they also can consult other medical practitioners in their workplace if they did not have time to go to the library. Furthermore, they can get a consultation with other medical practitioners in other institutions if they want.

Table 4: Satisfaction in searching the information (n=336)

	Frequency (%)				
	Very dissatisfied	Dissatisfied	Unsure	Satisfied	Very satisfied
Independent search	6	21	77	185	43
at library	(1.8)	(6.3)	(23.2)	(55.7)	(12.8)
Consult librarian	12	14	134	124	46
	(3.6)	(4.2)	(40.6)	(37.6)	(14.4)
Surf the internet	1 (0.2)	3	20	190	120
	(0.3)	(0.9)	(6.0)	(56.9)	(35.9)
Consult medical practitioner at workplace	6 (1.8)	13 (3.9)	80 (24.0)	190 (57.1)	44 (13.2)
Consult medical practitioner at other research institutions and universities	12 (3.6)	19 (5.7)	124 (37.3)	145 (43.2)	32 (97)

(c) Level of Satisfaction in the library services

In response of satisfaction towards library services, Table 5 indicated that the majority of respondents were very satisfied with answering the specific queries by the librarian (97.9%).

In response to the satisfaction of the library services, the majority of respondents were very satisfied with the services provided by the library especially with answering the specific queries by the librarian. The library provided numerous resources to allow users to keep searching the needed information. Thousands of reference sources were available in the library that covered practically in every subject. Reference sources provide answers to specific questions such as brief facts, statistics, technical instructions, provide background information; or lead to additional information sources. The current study had several limitations. The result of this survey may be subject to respondents' attitudes and the degree to which they responded accurately to the questionnaire. Also, the result of the study may not be generalizable to all medical professionals in Malaysia.

Frequency (%)

Table 5: Satisfaction of library services (n=336)

	Frequency (%)				
	Very dissatisfied	Dissatisfied	Unsure	Satisfied	Very satisfied
Printed resources	1 (0.3)	22 (6.6)	83 (24.9)	194 (58.3)	33 (9.9)
Electronic resources	2 (0.6)	20 (6.0)	32 (9.6)	200 (60.2)	78 (23.6)
Current awareness services	1 (0.3)	20 (6.0)	114 (34.2)	168 (50.5)	30 (9.0)
Inter library loan service	1 (0.3)	8 (2.4)	166 (49.8)	126 (37.8)	32 (9.7)
Answers to specific queries	9 (2.7)	121 (36.8)	161 (48.9)	38 (11.6)	329 (97.9)

CONCLUSION

The study concluded that the respondents were very satisfied with searching the information via surfing the internet as the internet was the major source of information. Also, due to the availability of internet access, they can easily access the information since there are plenty of information resources over the internet. University library provided good services since the majority of respondents were very satisfied with answering the specific queries.

ACKNOWLEDGMENTS

This study was supported by the Universiti Sains Malaysia Short Term Research Grant Scheme (304/JLIB/6313289). We would like to extend our heart-felt thanks to Universiti Sains Malaysia for awarding this grant, Medical Library Groups and all involved in this study.

REFERENCES

- Adomi, Esharenana E, Rose B Okiy, and Josiah O Ruteyan. 2003. "A survey of cybercafés in Delta State, Nigeria." *The electronic library*, Vol. 21, no.5:487-495.
- Ahmad, Nur Hafidzoh Asyiqin, Abd Rahim Romle, and Mohd Hafiz Mansor. 2015. "Exploring service quality and customer satisfaction at Library in Malaysia University." *International Journal of Administration and Governance*, Vol.1, no. 4:98-105.
- Asemi, Asefeh. 2005. "Information searching habits of Internet users: A case study on the Medical Sciences University of Isfahan, Iran." *Webology*, Vol. 2, no. 1:10.
- Attama, Okechukwu R. 2005. "Polytechnic education, library resources and technological development in Nigeria." *Global Review of Library Information Science*, Vol. 1 no. 1:9-18.
- Brown, Sorrel. 2010. "Likert scale examples for surveys." *ANR Program evaluation, Iowa State University, USA*.
- Chen, Hsinchun, Andrea L Houston, Robin R Sewell, and Bruce R Schatz. 1998. "Internet browsing and searching: User evaluations of category map and concept space techniques." *Journal of the American society for information science*, Vol. 49, no. 7:582-603.
- Dike, VW. 2000. "More than computers: Information technology in library and information science education." *Ibadan: NALISE*:50-59.
- Kassim, Norliya Ahmad. 2017. "Evaluating users' satisfaction on academic library performance." *Malaysian Journal of Library & Information Science* Vol. 14, no. 2:101-115.
- Lal, P, R Malhotra, C Ahuja, and GK Ingle. 2006. "Internet use among medical students and residents of a medical college of north India." *Indian Journal of Community Medicine* Vol. 31, no. 4:293-294.
- Mutula, Stephen M. 2003. "Cyber café industry in Africa." *Journal of Information Science* Vol. 29, no.6:489-497.
- Ohakwe, SN, and SI Okwuanaso. 2004. "Identification of information technology subskills needed by National Diploma secretarial studies graduates." *Unpublished Ph. D Thesis, Nnamdi Azikiwe University, Awka, Nigeria*.
- Padmavathi, N, A Ningaiah, and Kavita Biradar. 2017. "Use and User satisfaction of Library Resources and Services by PG Students and Research Scholars in Bangalore University Library, Bangalore." *International Research: Journal of Library and Information Science* Vol. 7, no. 1.
- Sivaraj, S, and Mohamed Esmail. 2007. "Use of internet by the students, faculty members, and research scholars in Bannari Amman Institute of Technology: An analysis." *Information Studies*, Vol. 13, no.4:219-226.