Journal Use Pattern at E. Latunde Odeku Medical Library, College of Medicine, University of Ibadan.

By
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Abstract

In spite of the importance of journals and journal use studies, consultation of Literature (the Africa Index Medicus, LIS journals and Health Literature in Nigeria i.e HELIN) revealed that prior to this study, no study on journal use in E. Latunde Odeku Medical Library (ELOML) -College of Medicine - University of Ibadan, Oyo state, Nigeria was found. This study was carried out to determine journal use behaviour of users and patterns as observed at the E. Latunde Odeku Medical library. The study has revealed the active users of the ELOML journal collection and at the same time assessed it. Related studies from India, US, Iran and Nigeria were reviewed with a view to determine resemblances in journal use patterns observed by other scholars from these countries. A total of One hundred and Twenty (120) questionnaires were placed at the circulation desk (from October to December 2011) for filling by journal users in this library and out of which One hundred and Two (102) were retrieved for data analysis. Data analysis was carried out using Statistical Package for social Sciences (SPSS), and the outputs were represented with tables and figures. Over all, the study has revealed that doctors are the most active users of ELOML journal Collection and most of the respondents prefer to read international journals more than local journals. However, a reasonable percentage of student doctors, student nurses and other professionals under study read more prints than e-journals.

Introduction

Journals contain current or topical information about Scholarly work in any discipline or field. They are a critical mass of the library's collection whose existence can be traced back to the 17th Century, and it relevance has continued to grow. As this mass of library's collection grows, metamorphosing from print journals to electronic journals, it becomes pertinent for Libraries to carry out studies on these materials to determine the expediency of libraries in the allocation of its scarce resource in this regard. Measuring the use of journals, whether print or e-journals, is one performance measure that can help determine whether money invested in these resources is well spent. Also, studies have shown that journals are the most valued information communication channels for researchers. It is important to study the use of this library material (either in print or electronic format) in order to determine scholars' attitudes, future patterns of use, for library development, and its impact on research (Kortelainen as cited by Omotayo 2004, p. 1). In the developed nations or countries, journal use studies are carried out by libraries often as a conventional way of assessing or evaluating the library's journal collection because of the central role journals play in research communication.

In spite of the importance of journals and journal use studies, consulting literature(like the Africa Index Medicus, LIS journals and HELIN revealed that prior to this study, no study on journal use in E. Latunde Odeku Medical Library (ELOML) -College of Medicine - University of Ibadan, Oyo state was found. However, studies on journal use in libraries exist in other states of the federation.

Objective

1. To determine active users of ELOML Journal collection.
2. To determine journal use pattern of these users.
3. To ascertain the frequency of utilisation of journals by ELOML users
4. Determine the most used journal type (International or Local journals)
5. Determine the most used journal format (Electronic or Print journal)
6. Assess the Journal Collection of ELOML.

Setting of the Study

The Medical Library also known as E.Latunde Odeku Medical Library (ELOML) , College of Medicine University is the oldest medical library in Nigeria. It is located in the premises of the college of Medicine adjacent to the University College Hospital (UCH) Ibadan Oyo State. It has been providing library services to Faculty members of the college, Consultants of the University teaching hospital, student doctors, student nurses, researchers as well as individuals across the country since its inception in 1948/66.It has about 200 registered users. ELOML material collection is made up of over 50000 volumes of books, Monographs and journal titles. Its E-classroom provide access to E-learning modules for medical students, and the computer network and internet services make it possible for users to access electronic resources like HELIN , Jaypee database, CD-ROM databases on diseases and HINARI, which allows users to access over 3000 full-text e-journal from online databases including, PubMed , AJOL , Biomed Central , etc.

Methodology

A questionnaire was developed after reviewing related literature. A survey of journal user at E. Latunde Odeku Medical Library College of Medicine University of Ibadan was conducted. A total of One hundred and Twenty (120) questionnaires were placed at the circulation desk (from September to December 2011) for filling by journal users in this library and out of which One hundred and Two (102) were retrieved. The response rate of the study was 85%. Data analysis was carried out using Statistical Package for social Sciences (SPSS), and the outputs were represented with tables and figures.

Literature Review

Most of the early studies carried out by scholars were on print journals. In recent times, journal use studies now focus not only on print journals but also on electronic journals.In Nigeria, a study was carried out on access, use and attitudes of academics to e-journals at the Obafemi Awolowo University in Osun. The study revealed that academics are aware of e-journals and majority of the academics in O.A.U (about 150 of 245) prefers print. However, most academic who prefers e-journal still prefers to download and read print later because reading on the screen can be tedious. While 95, out of the 245 academics prefer print. Some of the reasons given for this preference were Infrastructural problems like low bandwidth and technology failure which include server downtime and power failure. About 94% (230) believe that they will use e-journals in the future and all of the respondents believe the use of e-journals will continue to grow. However, only 35% of the respondents had published in journals with no print versions; reason being fear of non- acceptance by university authorities (Omotayo, 2010, p.4-8).

The above trend and pattern of journal use justifies a proposal for a hybrid collection of journals in a similar study in India on the use of e- journals by health care professionals in HMPCME. It was revealed that health care professionals consult journals for research purposes, dissertation writing, seminars, and lectures, treatment procedures for unusual case, journal clubs and to keep themselves informed .Also, the study established that health care professionals in HMPCME use print journals more than e-journals (i.e. 54.63% against 28.86% for prints). This study emphasized that preference of print journals over e-journals or vice versa, may vary from institution to institution. Hence, it is important for institutions to carry out their own study to determine journal use. The two scholars underscore the current need for a hybrid of journals. That is, a journal collection comprising e-journals and print journals; instead of going in one direction. The study did not record any significant use of e- journals as compared to prints journal for research (Trevedi & Joshi's, 2009, p13-15.).

Another survey has established that faculty use of personal print subscription remains significant and electronic personal subscription are used infrequently ; while the use of e-journals tend to be on the high side when available in the library. Sources of faculty journal articles are personal subscriptions, library collections, separate copies of preprints and reprints, and copies provided by colleagues and author websites. Faculty from the three universities considered in the study now read in several formats including print and electronic. This study has shown that university faculty read a great deal and scientists tend to read more than non-scientists. The journal read by university scientists has increased substantially over the past 25 years and most of this increase in reading has come from library collections. Also, articles read from the library journal collections tend to be of greater usefulness and value than articles obtained from other sources. And it seems there is a little difference in usefulness and value of electronic and print articles (King, Tenopir, Montgomery & Aerni, 2003, p. 2-11).

A similar study in the US measured the use pattern of online journals and databases in an academic health science center. The findings of this work demonstrated that the use of resources varies amongst user groups and user groups differ in their methods of accessing and frequency of use of online journals. The study confirms that a large percentage of users in academic health centres prefer e-journals to print and faculties prefer to access these online resources remotely rather than in the library. Also, the study has revealed that users select a small number of available resources and seem unaware of the other available resources (Groote & Dorsch 2003 p.2-5).

Likewise, a study on e-journals carried out (Sath, Grady & Giuse, 2002, p.6) on the impact of e-journals on research processes; produced similar results that seem to align with the result of Groote & Dorsch's study. However a slight difference was observed, because results from the work of the trio indicated that students and residents prefer e-journals, and faculty preferred print. Although, users prefer e-journals due to easy access and search than print; however, they reported that print journals had higher quality text and figures. The study supported the fact that the advent of e-journal has not altered research processes.

Another interesting submission was from (Rashidi, Gilchrist & Marir, 2008, p.1-10) a paper titled "An Investigation of International Journal Usage by Iranian Medical Researchers". It made use of the citations drawn from Iranian medical articles to evaluate the usage rate of international journals in Iran. The paper identified different format of materials like books, thesis, journals

and web resources used in Iranian medical research. The study states "that the citation half-life of international journals were 9yrs, while on the average 50 % of journals published in Iran were cited within 6yrs and web resources have the lowest half – life of 3years.This work has shown that medical researchers in Iran rely more on journals for research, and international journals has only met over 33% of the information needs of the Iranian medical researchers from 2002 to 2004.

Results And Discussion

The diagram below (Figure 1) presents the distribution of respondents by profession. The highest Percentage (33%) is for respondents who are doctors, followed by Nurses (29.4 %), student doctors(14.7), student nurses (6.9%) , Professional in Public health(5.9%), Pharmacy (2.6%) and Lab. Scientist (5.9) respectively. Table 1 shows gender distribution of respondents. As shown in the table the variation in the distribution by sex of respondents is not significant. Respondents that make use of the Library journal collection most according to Table 2 are doctors (33.2**%)** followed by Nurses (29.6%) and student doctors (14.8 %).Respondents that are student nurses and pharmacists both have 7.4% of the usage of the library's journal collection. The lowest percentage (3.7 %) goes to laboratory scientists and community health officers. This result follows the same order for other sources like 'Online 'and 'Personal subscription, Library collection and Online' with doctor (respondents) taking the lead followed by nurses and student doctors. However, for journal source like "Personal subscription", " Library collection" respondents that are nurses have the highest percentage followed by doctors and student doctors. Respondents in the field of public health according to the table do not use the library journal collection. Their source is mainly the web.

Figure 1: Distribution of Respondents by Profession

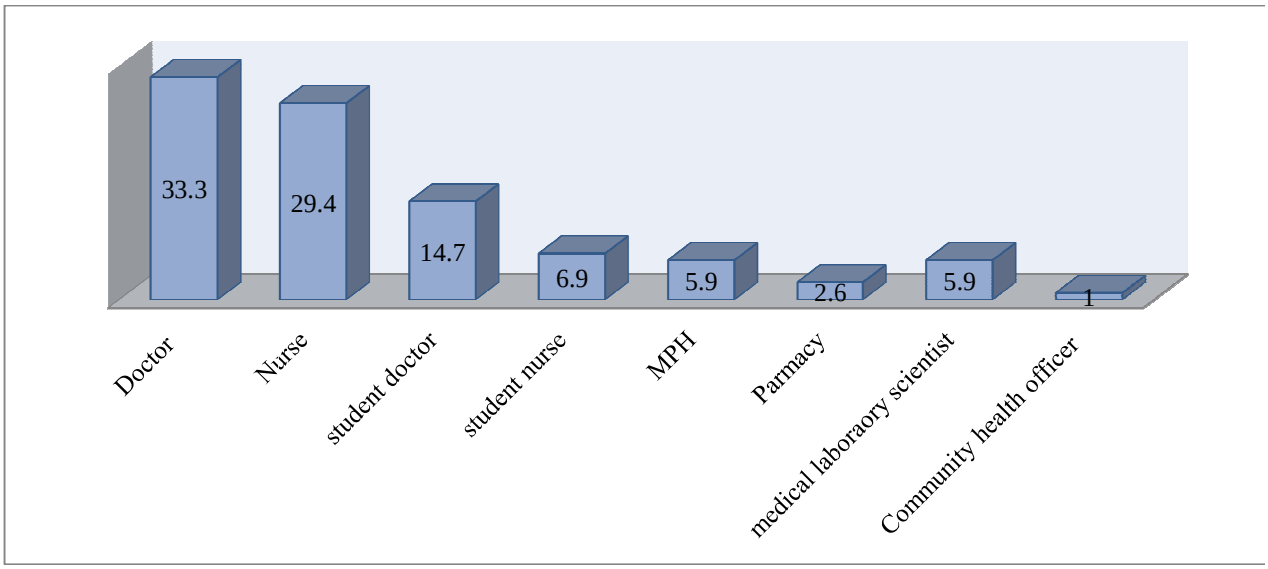

Table 1: Distribution of respondents by gender

Gender	Frequency	Percentage
Male	52	51.0
Female	50	49.0
Total	102	100.0

Table 2:Source of Journal Articles

Profession	Library Collection		From Colleagues		Online	%	Personal Subscription, Library Collection		Personal Subscription, Library Collection and Online		Total
	F	%	F	%	F	%	F	%	F	%	
Doctor	9	33.3	3	15	35.7		4	26.7	3	37.5	34
Nurse	8	29.6	4	40.0	9	21.4	7	46.6	2	25.0	30
Student Doctor	4	14.8	1	10.0	8	19.0	1	6.7	1	12.05	15
Student Nurse	2	7.4	1	10.0	4	9.5	0	0	0	0	7
MPH	0	0	0	0	6	14.4	0	0	0	0	6
Pharmacy	2	7.4	0	0	0	0.0	1	6.7	0	0	3
Medical Laboratory	1	3.7	1	10.0	0	0.0	2	13.3	2	25.0	6
Community health officer	1	3.7	0	0	0	0.0	0	0	0	0	1
Total	27	100	10	100	42	100	15	100	8	100	102

Table 3:Reasons for Reading Journal Articles

Profession	for research	patient care	Class work	current awareness	For research patient and instruction	Total
Doctor	14(37.8%)	9(31.0%)	0(0.0%)	9(53.0%)	2(33.3%)	34
Nurse	12(32.4%)	9(31.0%)	1(7.7%)	6((35.3%)	2(33.3%)	30
Student Doctor	6(16%)	3(10.4%)	5(38.47%)	0(0.0%)	1(16.7%)	15
Student Nurse	1(2.7%)	3(10.4%)	3(23.1%)	0(0.0%)	0(0.0%)	7
MPH	3(8.2%)	0(0.0%)	3(23.1%)	0(0.0%)	0(0.0%)	6
Pharmacy	3(8.2%)	3(10.4%)	0(0.0%)	0(0.0%)	0(0.0%)	3
Medical Laboratory	0(0.0%)	1(3.4%)	1(7.7%)	2(11.7%)	1(16.7%)	6
Community health officer	0(0.0%)	1(3.4%)	0(0.0%)	0(0.0%)	0(0.0%)	1
Total	37(100)	29(100)	13(100)	17(100)	6(100)	102

Table 4: Do you read local journal?

Profession	Yes	NO	Total
Doctor	24(34.3%)	10(32.3%)	34
Nurse	18(25.7%)	12(38.8%)	30
Student Doctor	10(14.3%)	5(16.1%)	15
Student Nurse	5(7.1%)	1(3.2%)	7
MPH	4(5.7%)	2(6.4%)	6
Pharmacy	3(4.3%)	0(0.0%)	3
Medical Laboratory	5(7.2%)	1(3.2%)	6
Community health officer	1(1.4%)	0(0.0%)	1
Total	70(100)	31(100)	102

Table 5: Do you read international journal?

Profession	Yes	NO	Total
Doctor	34(36.1%)	0(0.0%)	34
Nurse	24(25.5%)	6(75.0%)	30
Student Doctor	14(14.9%)	1(12.5%)	15
Student Nurse	6(6.4%)	1(12.2%)	7
MPH	6(6.4%)	0(004%)	6
Pharmacy	3(3.2%)	0(0.0%)	3
Medical Laboratory	5(6.4%)	0(0.0%)	6
Community health officer	1(1.1%)	0(0.0%)	1
Total	70(100)	8(100)	102

Table 3 presents respondents reasons for using journals. 36.2 % (37) of the respondents consult journals for research, about 28.4% use journal for Patient Care and the next significant percentage is 16.7% which is for Current Awareness.

Table 4 & 5 reveals the journal type that is most read by respondents. Almost all the respondents read international journals more than local journals. However, a lot of them (70%) still read local journals. Respondents that are doctors read international journals and local journals more than the others.

The tabular presentation above (Table 6**)** presents why respondents exhibit the pattern of journal use revealed from table 2 to table 6. 31% of the respondents exhibit the pattern of journal use pattern revealed by the tables because of "ease of access". While 28.4% of the respondents believe these patterns exist for them because of the journal source and the type they consult always meet their needs.

Table 7 shows the most preferred journal format by respondents. About half of the respondents prefer to read electronic journals. The table shows that doctors read e-journals than print. While others read print journals more than e-journals.

Over 50% of the respondents as shown in table 8 prefer the journal format they use because of ease of access. This is the most significant percentage recorded.

Reasons for reading local journal and foreign journal

Table 6: Reasons of Reading Pattern

Profession	It is always available	Ease of Access	Its titles are always up to date	It always meet my needs	It is always relevant	All of the above	Total
Doctor	5(45.5%)	13(40.6%)	3(25%)	3(25%)	10(34.4%)	0(0.0)	34
Nurse	1(9.1%)	6(18.8%)	6(50%)	6(50%)	7(43.9%)	2(0.0)	30
Student Doctor	3(27.3%)	5(15.6%)	5(15.6%)	2(16.7%)	4(33.4%)	0(0.0)	15
Student Nurse	0(0.0)	3(10.4%)	4(12.5%)	0(0.0)	0(0.0)	0(0.0)	7
MPH	1(9.1%)	0(0.0)	0(0.0)	1(8.3%)	1(8.4%)	0(0.0)	6
Pharmacy	1(9.1%)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	3
Medical Laboratory	0(0.0)	4(12.5%)	4(12.5%)	0(0.0)	1(8.4%)	0(0.0)	6
Community health officer	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	1
Total	11(100)	32(100)	12(100)	29(100)	16(100)	2(100)	102

Table 7: Which journal format do you prefer to read?

	Which journal format do you prefer to read?			
Profession	Print	Electronic	Print and Electronic	Total
Doctor	11(23.9%)	23(44.2%)	0(0.0)	34
Nurse	14(30.4%)	14(26.9%)	2(50.0%)	30
Student doctor	8(17.4%)	7(13.5%)	0(0.0)	15
student Nurse	4(8.7%)	3(5.8%)	0(0.0)	7
MPH	3(6.5%)	3(5.8%)	0(0.0)	6
Pharmacy	2(4.3%)	0(0.0)	1(25.0%)	3
medical laboratory	3(6.5%)	2(3.8%)	1(25.0%)	6
Community health officer	1(2.2%)	0(0.0)	0(0.0)	1
Total	46(100)	52(100)	4(100)	102

Table 8: Reason for your preference

		please tick the appropriate reason for your preference					
Profession	it is always available	Ease of Access	Its titles are always up to date	it always meet my needs	It is always relevant	All of the above	Total
Doctor	6	18	2	7	1	0	34
Nurse	5	12	4	5	1	3	30
Student doctor	3	10	2	0	0	0	15
student Nurse	0	4	1	0	2	0	7
MPH	2	2	0	1	1	0	6
Pharmacy	1	0	0	0	2	0	3
medical laboratory	0	5	0	0	0	1	6
Community health officer	0	1	0	0	0	0	1
Total	17(16.7%)	52(50.9%)	9(8.8%)	13(12.7%)	7(6.9%)	4(3.9%)	102

Table 9: Frequency of use of International Journals

Profession	Never	Daily	Weekly	Rarely (Hardly ever)	Often (A lot)	Always	Total
Doctor	0(0.0)	5(31.3%)	10(40%)	7(36.8%)	8(42.1%)	4(28.5%)	34
Nurse	2(25%)	5(31.3%)	6(24%)	6(31.8%)	4(21.1%)	7(50%)	30
Student Doctor	4(50%)	2(12.5%)	3(12%)	3(15.8%)	2(10.5%)	1(7.1%)	15
Student Nurse	2(25%)	1(6.3%)	3(12%)	1(5.2%)	0(0.0)	0(0.0)	7
MPH	0(0.0)	0(0.0)	2(8%)	0(0.0)	4(21.1%)	0(0.0)	6
Pharmacy	0(0.0))	2(12.5%)	0(0.0)	1(5.2%)	0(0.0)	0(0.0)	3
Medical Laboratory	0(0.0)	1(6.1%)	0(0.0)	1(5.2%)	1(5.2%)	3(21.4%)	6
Community health officer	0(0.0)	0(0.0)	1(4%)	0(0.0)	0(0.0)	0(0.0)	1
Total	8(100)	16(100)	25(100)	19(100)	19(100)	14(100)	102

The frequency of use of journal type by respondents has been revealed by tables 9 and10. Doctors are the most active users of the library journal collection.

Table 10 : Frequency of use of Local Journals

		local						Total
		Never	Daily	weekly	Rarely (Hardly ever)	Often (A lot)	Always (All the time)	
Profession	Doctor	20(62.5%)	5(55.6%)	2(15.4%)	5(16.1%)	2(13.3%)	0(0.0)	34
	Nurse	9(28.1%)	0(0.0)	5(38.4%)	11(35.5%)	5(33.3%)	0(0.0)	30
	Student doctor	1(6.7%)	1(11.1%)	2(15.4%)	7(22.6%)	3(20%)	1(50.0%)	15
	student Nurse	(0.0)	1(11.1%)	2(15.4%)	2(6.4%)	2(13.3%)	0(0.0)	7
	MPH	1(6.7%)	0(0.0)	1(7.7%)	3(9.7%)	1(6.8%)	0(0.0)	6
	Pharmacy	0(0.0)	2(22.2%)	0(0.0)	1(3.3%)	0(0.0)	0(0.0)	3
	medical laboratory	1(6.7%)	0(0.0)	0(0.0)	2(6.4%)	2(13.3%)	1(50.0%)	6
	Community health officer	0(0.0)	0(0.0)	1(7.7%)	0(0.0)	0(0.0)	0(0.0)	1
Total		32(100)	9(100)	13(100)	31(100)	15(100)	2(100)	102

Table 11: Information Needs of respondents

profession	Do you always get your information needs met each time you use these journal?		Total
	yes	No	
Doctor	30(49.1%)	4(9.8%)	34
Nurse	21(34.4%)	9(21.9%)	30
Student doctor	9(14.8%)	6(14.6%)	15
Student Nurse	5(8.2%)	2(4.8%)	7
MPH	5(8.2%)	1(2.4%)	6
Pharmacy	3(4.9%)	0(0.0)	3
Medical laboratory	3(4.9%)	3(7.5%)	6
Community health officer	1(1.1%)	0(0.0)	1
Total	61(100)	41(100)	102

Table 12: How would you rate the library's journal Collection?

		How would you rate the library's journal collection?					
		Very good	Good	Fair	Poor	I don't know	Total
profession	Doctor	4(40.0%)	4(23.5%)	19(42.2%)	1(25.0%)	6(23.2%)	34
	Nurse	1(10.0%)	7(41.2%)	13(28.9%)	1(25.0%)	8(30.8%)	30
	Student doctor	1(10.0%)	1(5.8%)	7(15.6%)	1(25.0%)	5(19.2%)	15
	student Nurse	1(10.0%)	2(11.8%)	1(2.2%)	0(0.0)	3(11.5%)	7
	MPH	0	1(5.8%)	2(4.4%)	0(0.0)	3(11.5%)	6
	Pharmacy	2(20.0%)	1(5.8%)	0(0.0)	0(0.0)	0(0.0)	3
	medical laboratory	0	1(5.8%)	3(6.7%)	1(25.0%)	1(3.8%)	6
	Community health officer	1(10.0%)	0	0(0.0)	0(0.0)	0(0.0)	1
Total		10(100)	17(100.0)	45(100)	4(100)	26(100)	102

As shown in table 11 (61 %) a lot of the respondents always get their information needs met each time they consult the library's journal collection and the remaining 41% never gets the information needed from the journals in the medical library.

Table 12 shows respondents rating of the library's journal collection. 45% rated the collection as fair, 17% thinks the collection is good and 10 % rated it as a very good collection.

In response to the question on which of the journals respondents want the library to increase, 32.4% of the respondents (which is the highest percentage) want the library to increase local electronic journals, while 27% wants international journals increased followed by 19% for local journals, 12% for local print and international print journals and 11% for International electronic journal respectively, as shown in Table 13.

Table 13: Which of the journals would you want the library to increase?

Journals	Frequency	Percentage
Local print journals	19	18.6
Local Electronic journals	33	32.4
international print journal	27	26.5
International Electronic journal	11	10.8
local print journals and international print journals	12	11.8
Total	102	100.0

Conclusion

This study has revealed the active users of ELOML journal collection. The most active being the doctors, followed by nurses, student doctors and student nurses respectively. While other respondents like professionals in public health, Pharmacists, Lab. Scientists and Health officers are the least active. The use of electronic journals by ELOML users seems to be on the high side when compare with the print journals. This is in line with all the study reviewed except (Trevedi & Joshi's, 2009, p13-15.) results and (King, Tenopir, Montgomery & Aerni, 2003, p. 2-11) study too. Also, respondents use of international journals is more, which is not supporting the study conducted in Iran (Rashidi, Gilchrist & Marir, 2008, p.1-10).All of the above findings further establish the view that each institution should conduct its own study to determine it journal use pattern (Trevedi & Joshi's 2009 p.15).

Over all, the library journal collection was rated fair by the respondents. This study has shown that doctors read more ELOML journal Collection than other users. Also, electronic format is the most read when compare with the print. However, student doctors, student nurses and other professionals like Lab. Scientists and Health officers read more prints than e-journals (this is shown in table 7). While other professional in public health according to the table 2 do not use the library journal collection, their main source is the web. Although, the library's journal collection was rated as fair, most of the respondents always get their journal needs met each time they use the library's journal collection.

Finally, the output of this study should help the library management and University authority direct it scarce resources in the right direction regarding journal acquisition. Ultimately, this will help the library meet the journal needs of it users and also determine the future direction of the library's development.

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