

Use of Journals among Doctors in Academic and Research Institutions in Chennai: A Study

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ABSTRACT

Research communication in medical domain was predominantly through journal articles. These journals were published by commercial organization, academic institutions and professional bodies either in print or online or sometimes in both formats. Enormous amount were spent towards these journals especially in medical domain. Therefore it is essential to study the use of journals among doctors in academic and research institutions in medical domain. A structured questionnaire was distributed among 605 faculty members of five private medical colleges in Chennai, taking into account 40% of the total respondents in each institution. The data were collected during August to December 2019. Out of 605 questionnaires distributed 497 were received. The response rate works out 82.15%. The use of journals were analysed based on type of journal referred, Source from which journals were accessed, choice of journal based on content and part of the journal frequently referred. 42% of medical professionals prefer both print and online journals. The source for the journal was from library print or online subscription and professional bodies. Speciality of the subject and affordability and quality of the journals were considered as preference in the choice of the journal. Letters to the editors, case report, original research papers and professional news were frequently referred by the doctors of the academic and research institutions of medical domain.

Keywords: Use of Journals, Medical professionals, Source of journal, choice of journal, Academic and Research institutions.

1. INTRODUCTION

Scientific research communication, especially in Science, Engineering, Medicine and Technological domain were communicated through journal articles. Majority of the academic and research institutions were spending enormously towards procurement of print as well as electronic version of journals. Further, professional bodies were publishing journals which seems to be important in medical domain. Therefore it is essential to know the use

of these journals. In this study, an attempt has been made to identify the use of journals among the doctors in academic and research domain.

2. USE OF JOURNALS

A number of studies on the use of journals in academic libraries have been carried out during last ten years especially on e-journals. The two CALIBER International conferences 2008 and 2009 focused mainly on electronic resources and their usage in libraries.

Boyce, et al (2004)[1] examined how electronic journals are changing the reading patterns of scholars over the past decade. Mounissamy, et al (2005)[2] in their research find that 67% of students and 33% of faculty at National Institute of Technology Tiruchirappalli (NITT), use the electronic journals to fulfill their information needs. Usage of electronic resources and services by engineering students (Sahu and Basa, 2009) [3], legal professionals (Thanuskodi 2009) [4], business administrative students (Maharana et al., 2010) [5] indicate positive attitude towards e-resources and their exhaustiveness. Much of literature has tended to focus more on measuring levels of use than on the reasons underlying use and non-use. Among the most significant contributions to journal use studies are, the Tenopir and King studies (Tenopir & King, 2000; Tenopir et al., 2003)[6], [7] that focussed mainly on physical and applied sciences, these studies have looked at facets such as:

- the use, usefulness and value of the articles read;
- from where scientists obtain the articles they read;
- the format of the articles obtained;
- how scientists learn about the articles they read and;
- the age of articles read (Tenopir 2004,2009) [8], [9]

3. OBJECTIVES

The objectives of the study are;

- To identify the use of journals among doctors in academic and research institutions.
- To identify the type of journal referred,
- To know the source from which journals were accessed
- To identify the choice of journal based on content among the medical professionals and

The part of the journal that has been frequently referred by the medical professionals. .

4. HYPOTHESES

The following hypotheses were formulated based on the objectives:

- There exist significant difference in type of journal referred,
- There exist unanimous opinion on the source from which journals were accessed
- There is no significant difference in the choice of journal based on content among the medical professionals and
- There exists significant difference in the part of the journal that has been referred by the medical professionals.

5. DATA CAPTURE

A structured questionnaire was distributed among 605 faculty members of five private medical colleges in Chennai, taking into account 40% of the total respondents in each institution. The data were collected during August to December 2019. Out of 605 questionnaires distributed 497 were received. The response rate works out to 82.15%. Received sample questionnaire were analyzed statistically.

Table 1. Personal information of respondents

S.No.	Description	Frequency	Percent	Cumulative Percent
AGE				
1	Below 30 yrs	114	22.9	22.9
2	31 to 40 yrs	179	36.0	59.0
3	41 to 50 yrs	49	9.9	68.8
4	51 to above yrs	155	31.2	100.0
Present Assignment				
1	Both Teaching and Practicing	359	72.2	72.2
2	Only Teaching	138	27.8	100.0
Gender				
1	Male	264	53.1	53.1
2	Female	233	46.9	100.0
Qualification				
1	MD	376	75.7	75.7
2	MS	121	24.3	100.0
Designation				
1	Professor & Head	25	5.0	5.0
2	Professor	101	20.3	25.4
3	Associate Professor	106	21.3	46.7
4	Assistant Professor	265	53.3	100.0
Overall				
	Total	497	100.0	

It can be seen from the table1 that 53.1% (264) were male and 46.9% (233) were female. Among 497 respondents, 114 (22.9%) were below 30 years. It is followed by 179 (36.0%) were 31-40 years; 49 (9.9%) were between 41 and 50years and 155(31.2%) were above 51 years. Out of 497 respondents, 359 (72.2%) were have both teaching and practicing and 138 (27.8%) were only teaching. Nearly 376 (75.7%) were having MD qualification and the remaining 121 (24.3%) were with MS qualification. Out of 497 respondents, 5% (25) were Professor and Head; 20.3% (101) were Professors; 21.3% (106) were Associate Professors. The remaining 265 (53.3%) were Assistant Professors.

6. DATA ANALYSIS

The use of journals were analysed based on type of journal referred, Source from which journals were accessed, choice of journal based on content and part of the journal frequently referred.

6.1 Type of Journal referred

The journals thus referred among medical professionals has been analysed and the same has been shown in table 2.

Table 2: Type of journal referred

S.No.	Type of Journal	Frequency	Percent	Cumulative Percent
1	Print	192	38.6	38.6
2	Electronic Version	96	19.3	57.9
3	Both	209	42.1	100.0
	Total	497	100.0	

Nearly 192 (38.6%) refer print journals. Only 96 (19.3%) medical professionals refer electronic version where as 209 (42.1%) professionals refer both electronic and print version.

6.2 Source of journals

Source from which journals were accessed based on three variables such as library print subscription, library online subscription and through professional bodies were studied. The same has been analysed and shown in Table 3.

Table 3: Source for use of journal

S.No.	Description	Yes		No	
1	Library Print Subscription	344	69.2%	153	30.8%
2	Library online/e-version	352	70.8%	145	29.2%
3	Through professional body	346	69.6%	151	30.4%

Nearly 352 (70.8%) of medical professionals prefer library online/e-version. It is followed by “through professional bodies” (346, 69.6%) and “Library Print Subscription (344, 69.2%)”. There is no much deviation in use of library print or online subscription and through professional bodies. The usage percentage ranges between 69.2% and 70.8%. The analysis was further extended to demographic details such as gender, age, qualification and professional assignment. The same has been shown in Table 4.

Table 4. Source for use of journals vs. gender, age, qualification and professional assignment.

S.No.	Description	Library Print Subscription	Library Online Subscription	Through professional body	Preference
GENDER					
1	Male	264	195	179	P>O>PR
2	Female	80	157	167	PR>O>P
	Preference	M>F	M>F	M>F	
AGE					
1	Below 30 yrs	107	81	81	P>O=PR
2	31 to 40 yrs	78	121	121	PR=O>P
3	41 to 50 yrs	31	33	33	O=PR >P
4	51 & above yrs	128	111	111	P>O=PR

	Preference	51 &A> B30> 31-40>41-50	31-40>51 &A> B30> 41- 50	31-40>51 &A> B30> 41-50	
QUALIFICATION					
1	MS	322	280	263	P>O>PR
2	MD	22	72	83	PR>O>P
	Preference	MS>MD	MS>MD	MS>MD	
ASSIGNMENT					
1	Only Teaching and Training	311	261	246	P>O>PR
2	Both Practicing and Teaching	33	91	100	PR>O>P
	Preference	TT>PT	TT>PT	TT>PT	
OVERALL					
	Total	344	352	346	O>PR>P

It can be seen from Table 4 that male medical professionals use library print and online subscription of journals. Some of them use journals published through professional bodies. Males refer print subscription more than online and professional body journals. In the case of females, the predominant preference was for professional body journals. 51 and above age group professionals use library print subscription whereas 31 to 40 age group professionals use online subscription and professional body journals. The professionals with MS qualification use print journals more than online and professional body journals whereas MD qualified professionals use professional body journals more than online and print journals. Teaching and training professionals use journals more than practicing and teaching professionals. The order of reference of these two categories of professionals differs. Teaching training professionals use print more than online and professional body journals whereas, practicing and teaching professionals use professional body journals than online and print journals. In general, online journals were used more. It is followed by professional body journals and print journals.

7. CHOICE OF THE JOURNAL

The choice of the journal was ascertained based on four variables such as Speciality of the subject, Affordability, Speed of Publication and Quality. The opinion were obtained in a five point scale such as Strongly disagree, disagree, No opinion, Agree and Strongly Agree. The mean and standard deviation were calculated based on the opinion. The ranks were assigned based on mean and standard deviation. The respondents' opinion, mean, standard deviation and rank are shown in Table 5.

Table 5. Choice of the Journal

S.No	Description	Strongly disagree		disagree		No opinion		Agree		Strongly Agree		Mean	Std	Rank
1	Specialty of the subject	9	1.8%	27	5.4%	110	22.1%	134	27.0%	217	43.7%	4.05	1.019	1
2	Affordability	11	2.2%	27	5.4%	100	20.1%	174	35.0%	185	37.2%	4.00	.996	2

3	Speed of Publication	7	1.4 %	51	10.3 %	125	25.2 %	203	40.8 %	111	22.3 %	3.72	.968	4
4	Quality	15	3.0 %	52	10.5 %	134	27.0 %	143	28.8 %	153	30.8 %	3.74	1.096	3

The mean value of all the variables ranges between 3.72 and 4.05 which indicates that all the variables were lean towards agree. The standard deviation ranges between 0.968 and 1.096 which indicates that there were no much deviation in the respondents' opinion. The first preference were indicated towards specialty of the subject. It is followed by affordability, quality and speed of publications. The analysis were further extended to demographic details such as gender, age, qualification and professional assignment. The same has been shown in Table 6.

Table 6. Choice of the Journal Vs. gender, age, qualification and professional assignment.

S.No.	Description	Specialty of the subject	Affordability	Speed of Publication	Quality	Preference
Gender						
1	Male	3.99	3.93	3.70	3.69	S>A>P>Q
2	Female	4.08	4.02	3.74	3.76	S>A>Q>P
	Preference	F>M	F>M	F>M	F>M	
AGE						
1	Below 30 yrs	3.82	3.82	3.75	3.72	S=A>P>Q
2	31 to 40 yrs	4.00	3.96	3.69	3.68	S>A>P>Q
3	41 to 50 yrs	3.98	3.86	3.55	3.69	S>A>Q>P
4	51 & above yrs	4.31	4.21	3.81	3.83	S>A>Q>P
	Preference	51 &A>31-40>41-50>B50	51 &A>31-40> 41-50>B50	51 &A> B50> 31-40>41-50	51 &A> B50> 31-40>41-50	
QUALIFICATION						
1	MS	4.07	3.99	3.74	3.73	S>A>P>Q
2	MD	3.98	4.00	3.69	3.78	S>A>Q>P
	Preference	MS>MD	MD>MS	MS>MD	MD>MS	
ASSIGNMENT						
1	Only Teaching and Training	4.14	4.09	3.73	3.72	S>A>P>Q
2	Both Practicing and Teaching	3.88	3.81	3.72	3.77	
	Preference	TT>PT	TT>PT	TT>PT	PT>TT	
OVERALL						
	Total	4.05	4.00	3.72	3.74	S>A>Q>P

It can be seen from Table 6 that female medical professionals' choice of the journal based on specialty of the subject, Affordability, Speed of Publication and Quality than male even though both agreed for all choice of variables. Similarly 51 and above age group have similar preferences on choice of journal. The professionals with MS qualification choice based on specialty of the subject and speed of publication whereas MD qualified professionals choose the journal affordability and quality of the journal. Teaching and training professionals choose the journal more than practicing and teaching professionals. The order of preference of these two categories of professionals differ. The order of use of teaching training professions choose of the journal based on specialty of the subject, Affordability and Speed of Publication whereas practicing and teaching professional choose Quality journals. In general the order of preference of choice of the journal was specialty of the subject, affordability, quality and speed of the publications.

8. PART OF THE JOURNAL FREQUENTLY PREFERRED

The part of the journal frequently preferred were ascertained based on six variables such as Professional news; Review of progress, Editorial committee, Original research papers, Case reports and Letters to the editors The opinion were obtained in a five point scale such as Never, Rarely, Occasionally, Frequently and Very frequently. The mean and standard deviation were calculated based on the opinion. The ranks were assigned based on mean and standard deviation. The respondents' opinion, mean, standard deviation and rank were shown in Table 7.

Table 7. Part of the journal frequently preferred

S.No	Description	Never		Rarely		Occasionally		Frequently		Very frequently		Mean	Std	Rank
1	Professional news	14	2.8%	47	9.5%	71	14.3%	193	38.8%	172	34.6%	3.93	1.057	4
2	Review of progress	26	5.2%	87	17.5%	65	13.1%	161	32.4%	158	31.8%	3.68	1.233	6
3	Editorial committee	25	5.0%	50	10.1%	56	11.3%	185	37.2%	181	36.4%	3.90	1.151	5
4	Original research papers	11	2.2%	33	6.6%	89	17.9%	202	40.6%	162	32.6%	3.95	.984	3
5	Case reports	3	.6%	36	7.2%	86	17.3%	201	40.4%	171	34.4%	4.01	.929	2
6	Letters to the editors	13	2.6%	30	6.0%	69	13.9%	202	40.6%	183	36.8%	4.03	.992	1

Nearly 64% to 77% of medical professionals use all part of the journals either frequently or very frequently. The mean value of all the variables ranges between 3.68 and 4.03 which indicates that all the variables were lean towards agree. The standard deviation ranges between 0.929 and 1.233 which indicates that there were no much deviation in the respondents' opinion. The first preference were indicated towards letters to the editors. It is followed by case report, original research papers and professional news. The least preference were indicated review of progress and editorial committee. The analysis has further been extended to demographic details such as gender, age, qualification and professional assignment. The same has been shown in Table 8

Table 8. Part of the Journal Frequently Preferred Vs. gender, age, qualification and professional assignment

S.No.	Description	Professional news	Review of progress	Editorial committee	Original research papers	Case reports	Letters to the editors	Preferences
Gender								
1	Male	3.80	3.74	3.82	4.01	4.02	4.09	L>C>O>E >P>R
2	Female	3.99	3.66	3.93	3.92	4.00	4.01	L>C>P>E >O>R
	Preference	F>M	M>F	F>M	M>F	M>F	M>F	
AGE								
1	Below 30 yrs	3.90	3.77	3.88	3.89	3.93	3.98	L>C>P>O >E>R
2	31 to 40 yrs	3.95	3.70	3.92	4.04	4.13	4.09	C>L>O>P >E>R
3	41 to 50 yrs	3.78	3.33	3.76	3.96	3.96	4.12	L>C=O>P >E>R
4	51 & above yrs	3.97	3.70	3.94	3.88	3.94	3.96	P>L>C=E >O>R
	Preference	51 &A>31-40>B30>41-50>	B30>51 &A=31-40>41-50	51 &A>31-40>41-50>B30>	31-40>41-50>B30>51 &A>	31-40>41-50> 51 &A> B30	41-50>31-40>B30>51 &A>	
QUALIFICATION								
1	MS	3.93	3.69	3.89	3.93	3.98	4.03	L>C>P>O >E>R
2	MD	3.94	3.65	3.92	4.02	4.09	4.04	C>L>O>P >E>R
	Preference	MS>MD	MD>MS	MS>MD	MD>MS	MD>MS	MD>MS	
ASSIGNMENT								
1	Only Teaching and Training	3.94	3.69	3.94	3.95	4.00	4.06	L>C>O>E =P>R
2	Both Practicing and Teaching	3.91	3.67	3.82	3.94	4.03	3.98	C>L>O>P >E>R
	Preference	TT>PT	TT>PT	TT>PT	TT>PT	PT>TT	TT>PT	
OVERALL								
	Total	3.93	3.68	3.90	3.95	4.01	4.03	

It can be seen from table that male medical professionals prefer Review of progress, Original research papers, Case reports and Letters to the editors whereas female prefer Professional news and Editorial committee even though both were indicated that they use very frequently all parts of the journals. Similarly 51 and above age group prefer Professional news and Editorial committee whereas 31-40 age group prefer original research and case report. Below 30 age group prefer Review of progress and 41 to 50 age group prefer letters to the editors. The professionals with

MS qualification prefer Professional news and Editorial committee whereas MD qualified professionals prefer Review of progress, Original research papers, Case reports and Letters to the editors. Teaching and training professionals prefer Professional news; Review of progress, Editorial committee, Original research papers, and Letters to the editors where as teaching professionals prefer case reports.

9. CONCLUSION

This study was carried out with the objective to identify the use of journals among doctors in academic and research institutions. Further this study also identifies the type of journal referred, source from which journals were accessed. This study enumerates the choice of journal based on content and frequently referred part of the journal. This study indicated that there exist significant difference in type of journal referred; However, there is an unanimous opinion on the source from which journals were accessed. The study does not indicate the much significant difference in the choice of journal based on content among the medical professionals. However, there exist significant different in the part of the journal that has been referred by the medical professionals. The majority of the doctors refer case study, original research papers, letters to the editor and professional news. Specialty of the subject and affordability were the criteria in choice of the journal.

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