

A Comparative Study of Information Seeking Behaviors of Medical Faculty Working in Government and Private Run Medical Colleges

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Abstract

The purpose of the research was to examine patterns of information seeking and to determine the difference in information seeking behaviors of Government and Private Faculty members of medical colleges. A survey of government and private medical colleges was conducted, 112 medical faculty of different cadre were selected by using convenience method. Data was analyzed using SPSS version 19. Frequency and percentage of each statement were calculated. Chi-square test was conducted to find association between type of faculty and type of responses. The results of the analysis show that medical faculty use varied channels to update their knowledge of the subjects and differences also exist in information seeking behaviors of government and private medical faculty on some issues. Generally faculty teaching in government medical colleges tends to use library resources more as compare to private medical faculty.

Key Words:

Information seeking behaviour, medical information and knowledge, differences in information seeking behaviours, medical faculty information seeking, faculty information seeking.

Introduction

In every society, medical education is a compulsory part of its education system. Medical education ensures the health of the people of the society. The quality of services of doctors depends on up-to-date information and knowledge about diseases, diagnosis process, equipments, latest research and available medicines. There are many ways to get fresh, authentic and reliable knowledge. In the information language we call it information seeking. The level of access to information, in addition to other factors also depends on individual's information seeking habits, behaviors and skills. Information seeking has been defined as "an activity of an individual that is undertaken to identify a message that satisfies the perceived needs" (Adewole, 1984, Nwokedi and Haruna 2005). Similarly, Devadason and Lingam (1997) wrote that through understanding information seeking patterns of different professional groups, it is easy to plan and implement provision and access to information in their fields of interest.

Access to information is vital for medical practioners and faculty to handle health problems of the society and for education of the young medical students. Access to and use of updated information is important to avoid intellectual stagnation and introduce innovative means of dealing health issues (Sulemani and Katsepor 2007). Bigdeli (2004) mentioned that a significant amount of medical information changes rapidly and at a faster speed. Inventions in diagnostic methods, rejection of earlier methods and techniques and abandoning existing medicines require that medical teachers and practioners remains updated through seeking fresh, authenticated information in their respective field. Studies on information seeking behavior of medical faculty reveal varied channels of obtaining

information such as, consultation with colleagues, use of journal articles, books (Osiobe 1986, Cheng and Lamb 1996, Premsmith 1990, Nwokedi and Haruna 2005). In addition they use electronic databases and indexes like PubMed, Medline, CINAHL and HINARI for their continuous professional development and research (Shamin 2005, Smith et al 2007, Davies 2007 and Younger 2010). Findings of a study by Zawawi and Majid (2001) revealed that biomedical scientists used different sources for their research and teaching needs, including discussion with their colleagues, reading books and print journals. Despite availability of electronic resources they preferred to use print resources.

The quality of education in health sector of Pakistan meets the international standards. The Pakistan Medical and Dental Council (PMDC) controls Medical Education across Pakistan. All Medical Colleges are monitored by the Pakistan Medical and Dental Council every year. Without permission of PMDC no college or university can award degree or diploma to their students. There are 104 Medical and Dental colleges recognized by Pakistan Medical and Dental Council (PMDC) to impart medical education in the country. Pakistani doctors are considered one of the best and are doing meritorious services in all parts of the world (PMDC 2012). However in a number of studies researchers have mentioned flaws and serious shortcoming in the quality of medical education in Pakistan. They have stressed the changes in curriculum, the communication skills of the medical faculty and provision of medical literature and research activates (Afridi 1962, Muzzafar 1991, Khan, Biggs and Mubbashar 2011, Nasim 2011)

Library and information resource center is considered as hub of information sources and it helps in getting access to existing knowledge as well as provides a foundation for creation of new knowledge and theories (Majid, Anwar and Eisenschitz 2000). Access to health information has been significantly influenced by the application of information and communication technologies in its creation, dissemination, and its usage and archival. Like other developing countries, Pakistan was slow in adopting new developments of ICTs. However, Pakistan has certain advantages among the developing countries in terms of Teledensity. The coverage and cost of email and Internet is comparatively better in Pakistan as compared to many developing countries of the world. The number of Internet users has been rising rapidly since the end of the last century. Commercial cyber cafes are appearing in major cities in Pakistan, and some community tele-centers have also been established by public bodies (Saeed et al. 2000, Rizvi 2003, Khan 2004, Ramzan 2004 and 2009).

The Government of Pakistan is promoting use of Internet and providing access to medical literature and research materials through its National Digital Library. All the universities in Pakistan are linked electronically through PERN (Pakistan Educational Research Network) project and they can access journals, books and thesis electronically. However, their use pattern varies institute to institute. Libraries in medical institutes are well equipped with the medical journals and books. However, there is inequity in terms of availability of resources and information retrieval systems in public and private medical institutes (Saeed et al 2000, Said 2006, Ramzan 2009, and HEC 2012). However, these studies depict status of general libraries in Pakistan. However, no comprehensive study have been carries so far to investigate the information seeking behavior of medical faculty and to find if a significant difference exist between respondents of public and private colleges. Provision and use of health information is directly linked with the health and life of people; which is the most sensitive part of our life. We need to understand, how medical faculty in our public and private colleges use print and electronic resources to update their knowledge and skills. Resultantly, it will help to understand and address any in-equity in access to latest and authentic information and knowledge between public and private sector medical institutes.

Research Methodology

The study focused on primary data collection. A sample of 112 faculty members from 10 medical colleges, out of which five are in govt. sector and five are in private sector was selected by

using convenient sampling method. These faculty members represent different cadre of medical education. The ratio of male to female is 1: 1.7. The purpose of the study was to explore information seeking behaviors of faculty members of medical colleges in Lahore. The design of the study was survey research. A questionnaire was developed on the basis of extensive review of literature. The Questionnaire was consisted of two parts, one was related to demographic information and other part is a set of questions related to information seeking behaviors.

Findings

Results of primary data are presented here. SPSS ver. 15 was used to analysis the data. Frequency and percentage of responses of medical faculty about different aspects related to information seeking behavior were calculated. Chi-square test was conducted to find any association between privet and government sector on information seeking behavior.

Demographic Data

Data in Table 1 shows that male medical staff is 42 (37.5%) and female medical staff is 70 (62.5%) participated in the seeking information survey. It is encouraging that female medical faculty heavily participated in this study. Majority of the participants are demonstrators (51%) and 35% are assistant professors, 5% associate professor and 9% are professors. The highest qualification of medical staff is M. Phil and the qualification of majority faculty members (54.4%) is MBBS. None of the respondents had a PhD degree. As for as the type of institution is concerned, majority (63.4%) respondents were from privately run medical colleges.

Table 1

Frequency and Percentage distribution of participants with respect to gender, designation and qualification

Characteristics		n	%
Gender	Male	42	37.5
	Female	70	62.5
	Total	112	100.0
Type	Number of participants from Private Colleges	71	63.4
	Number of participants from Government Colleges	41	36.6
	Total	112	100
Designation	Demonstrator	57	51
	Assistant Professor	39	35
	Associate Professor	6	5
	Professor	10	9
	Total	112	100
Qualification	MBBS	61	54.4
	FCPS	16	14.3
	M.Phil	35	31.3

Type of Information Sources Used by the Medical Faculty

Data in Table 2 reflects the number and percentage of use of different sources of information both by private medical college and government medical colleges' faculty. Almost 86% private

medical colleges faculty out of total private medical colleges faculty discuss with colleagues and 68% government medical colleges faculty out of total medical colleges faculty discuss with colleagues to seek information, total 79.5% of medical faculty discuss with colleagues to seek information and new knowledge. Second highest source (56.3%) used for seeking information was review articles, 63% in private sector and 43.9% in government sector review articles for getting information. The faculty also preferred to consult their supervisors to update their knowledge.

Chi-square test indicate that there is statistically significant difference in discussion with colleagues, private medical faculty discuss more with colleagues as compare to government medical faculty. There is no statistically significant difference in using Library catalogue, consulting supervisor, and discussion with librarian, abstracting journals, indexing journals and consulting a knowledgeable person in the field. Also there is statistically significant difference in private medical faculty and government medical faculty in using review articles to update their information and knowledge.

Table 2

Sources of information used by medical faculty for seeking information. (Participants from private Colleges n=71, Participants from Government Colleges = 41, N=112)

Sources of information	Private		Govt.		Total		χ^2 value	P-value
	n	%	n	%	n	%		
Discussion with colleagues	61	85.9	28	68.3	89	79.5	4.95	0.026*
Library catalogue	16	22.5	9	22.0	25	22.3	0.005	0.943
Consult supervisor	35	49.3	23	56.1	58	51.8	0.482	0.488
Discussion with librarian or reference staff of you library	6	8.5	7	17.1	13	11.6	1.883	0.170
Review articles	45	63.4	18	43.9	63	56.3	4.007	0.045*
Abstracting journals	26	36.6	20	50.0	46	41.4	1.88	0.169
Indexing journals	9	12.7	9	22.0	18	16.1	1.66	0.198
Consult a knowledgeable person in the field	24	33.8	7	17.1	31	27.7	3.634	0.057

*P<0.05

Table 3

Medical Faculty opinion about Purpose of Information Seeking (N=112).

Statements	Private		Govt.		Total		χ^2 value	p-value
	n	%	n	%	n	%		
1 For doing research work	41	58	28	68	69	62	1.22	0.269
2 For writing and presenting paper	36	51	18	44	54	48	0.482	0.488
3 For updating knowledge	46	65	26	63	72	64	0.021	0.884
4 For preparing class lectures	46	65	21	51	67	60	1.99	0.158
5 For guiding researchers	20	28	13	32	33	30	0.157	0.692
6 For entertainment	11	16	4	10	15	13	0.737	0.390

Purpose of Seeking Information

In response to a question on purpose of seeking information the data in Table 3 reveals that public and private Medical Faculty's opinion about Purpose of Information Seeking is not statistical significant. Results shows that 62% faculty seek information for doing research work, 48% for writing and presenting paper, 64% for updating knowledge and 60% for preparing class lectures, only 30%

used for guiding researchers and 13% for entertainment. One third of medical faculty is not active for getting information, which is a matter of concern.

Type of Materials Used for Information Seeking

Table 4

Type of materials searched by Medical faculty (N=112)

Statements	Private		Govt.		Total		χ^2 value	p- value
	n	%	n	%	n	%		
1 Text books	59	83	35	85	94	84	2.127	0.345
2 General books	25	35	17	42	42	36	0.433	0.510
3 Reference books	65	92	33	81	98	88	2.908	0.088
4 Periodicals	12	17	10	24	22	20	0.923	0.337
5 Research reports	27	38	22	54	49	44	2.580	0.108
6 Gov. Publications	2	3	3	7	5	5	1.234	0.267
7 Pamphlets	7	10	3	7	10	9	0.207	0.649
8 Exhibition	8	11	14	34	22	20	8.619	.003*
9 News paper	41	58	10	24	51	46	11.66	.001*

*p<0.05

Table 4 shows that there is no statistical significant difference between private and public medical faculty's opinion about type of materials i.e. Text books, general books, reference books, Periodicals and Research reports, Government Publications, Pamphlets. There is statistical significant difference between private and public medical faculty's opinion about type of materials i.e. Exhibition and newspapers. Results indicate that majority of medical faculty get information from textbooks and reference books and there is a discouraging use of periodicals that provide latest research.

Use of Access Tools

Data in Table 5 depicts that there is no statistical significant difference between private and public medical faculty's opinion about tools to get access to the documents. Seventy one percent medical faculty use book reviews, 67% references from a book, 50% abstracting journals, 33% Indexing journals, 19% References from a periodical article, 21% from library catalogue and 7% from bibliographies produced by library staff.

Table 5

Tools used by medical faculty to get access to the documents

Statements	Private		Govt.		Total		χ^2 value	p- value
	n	%	n	%	n	%		
1 Book reviews	48	68	31	76	79	71	0.801	0.371
2 References from a book	49	69	26	63	75	67	0.368	0.544
3 Abstracting journals	34	49	22	54	56	50	0.268	0.605
4 Indexing journals	23	32	14	34	37	33	0.036	0.849
5 References from a periodical article	11	16	10	24.4	21	19	1.351	0.245
6 Library catalogue	16	22.5	7	17.1	23	21	0.475	0.491
7 Bibliographies produced by library staff	6	8.5	2	4.9	8	7	0.50	0.479

Language-wise Use of Sources for Information Seeking

Table 6 reflects that there is no association between Sector (private, Govt.) and Language of Reading Material. Results show that 96% medical faculty read material in English and only 14% medical faculty read material in Urdu.

Table 6

Association between Public and Private Sector Medical faculty and Language of Reading Material

Statements		Private		Govt.		Total		χ^2 value	p-value
Language		n	%	N	%	n	%		
1	English	70	99	38	93	108	96	2.635	0.105
2	Urdu	11	16	12	14	16	14		

Use of Electronic Databases to Find Information

Table 7 displays about Search databases used by medical faculty. There is statistical significant difference between private and medical faculty in use of databases, 50% of medical faculty use MEDLINE ,only 38% medical faculty use WHO and 35% medical faculty use PUBMED for seeking information

Table 7

Search Databases used by Medical Faculty

Search Databases		Private		Govt.		Total		χ^2 value	p-value
		n	%	n	%	n	%		
1	MEDLINE	37	52	19	46	56	50	0.346	0.555
2	PUBMED	27	38	12	29	39	35	0.879	0.349
3	NLM	8	11	7	17	15	13	0.755	0.385
4	WHO	29	41	14	34	43	38	0.493	0.483
5	DOAJ	3	4	0	0	3	3	1.780	0.182
6	Any other	1	1	2	5	3	3	1.200	0.273

Discussion and Implications

Information seeking behavior varies from person to person and discipline to discipline. Medical discipline has its own dynamics in terms of use of resources for information seeking. Medical faculty of government and private colleges varies in terms of salary packages and other compensations. Government medical faculty enjoys more freedom with respect to duties hours and vacations as compare to private medical faculty. Government medical colleges admit students of high merits as compare to private medical colleges. These variations may affect information seeking behavior of government and private medical faculty. Findings revealed that in terms of designation majority of the faculty (86%) were demonstrators or assistant professors and only 14% were experienced faculty. None of the respondent faculty had PhD and half of the respondents (54.4%) had only MBBS degree. These figure are alarming as for as the qualification and experience of the medical faculty is concerned.

Results show that a large majority (86%) of the private medical colleges' faculty and 68% government medical colleges' faculty discuss with their colleagues to seek information. Therefore a significant difference exists in the information seeking behaviour of the government and private medical faculty in terms of seeking information from colleagues. From the data, it implies that faculty in private colleges is more open to share their knowledge as compare to faculty in government run medical colleges. In total 79.5% of the respondent medical faculty discuss with colleagues to seek information. Second highest source (56.3%) used for seeking information was review articles, 63% in private sector and 43.9% in government sector review articles for getting information. Results of the Chi-square tests indicate that a statically significant difference exists between the private and

government medical faculty in use of review articles for seeking update information. Less use of librarian and indexing journals was determined. There is no statistically significant difference in using Library catalogue, consulting supervisor, and discussion with librarian, abstracting journals, indexing journals and consulting a knowledgeable person in the field.

No significant difference was found in the purpose of use of information sources as figures for research work, writing and presenting, updating knowledge and preparing lecture notes were similar. It was surprising that the faculty in both private and government run medical colleges heavily relied on text and reference books and less on current periodical literature. Half of the respondents used MEDLINE, 35% used PUBMED, and 38% used WHO databases to seek information in their fields. Despite availability of the resources the percentage of faculty use of electronic databases is worrisome and this needs to be addressed on priority.

From the findings it can be concluded in the faculty in both the privately and government run colleges relies on secondary sources of knowledge to update their information and knowledge level. Moreover they tend to get help from colleagues to seek further information. However there was a little use of current periodical literature to get up-to-date knowledge in their subjects

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