Knowledge Management in Health Science Librarianship

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Abstract

An exciting and unstable and unsettling environment is influencing the health sciences information management professions in how day practice, whom they serve, where they practice, what service they provide, and the composition of the health information professions. Tremendous advances in medicine and health care have been taken place and will continue during the next century. However, provision of quality health care to all may be more difficulty as control of health care management networks is visualized. Networks increasingly focus on cost containment issues sometimes at the expense of quality care. The challenge for information professions is to deliver traditional information services both in person and in electronic version. Finally, this paper discusses the short coming of knowledge in handling health libraries and implication and suggestions

Keywords

knowledge Management; Health libraries; application of knowledge management; information management

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1. INTRODUCTION

The rapid changing in information communication technology and advances in technology allow librarians to provide effective research, and instructional service to dealt with these to the users health librarianship is required knowledge and skills to update day to day changing scenario in the digital environment. The rapid increase in medical information poses several challenges for keeping up-to-date with the latest developments in the field. Information searches can be difficult without a basic knowledge of the way information is organized and indexed. In preparing scientific studies and in making clinical decisions, the key issue is to effectively scrutinize previous literature. That is why familiarity with medical information sources and the ability to use them effectively is important. In a rapidly developing science, journals are an important channel for disseminating new information, and they are the primary publication medium for professional and scholarly communication in medicine in specific and any scientific field in general. Often it is understood that the searches are vary random and at times need some education in searching and in the formulation of logical search strategy. Adequate training in information-searches leads to an increase in the development of more sophisticated electronic information resources. The explosion of information, the emergence of evidence-based care, new internet-based technologies, rapid growth of online bibliographic databases and shifts to electronic publication practices means that knowing how to conduct effective information searches is that much more sought after needs of the users. Health librarianship should be aware of recent trends that impact the purpose, policies, programs and activities of the organization that shape health care information system.

2. KNOWLEDGE MANAGEMENT IN HEALTH SCIENCE

The medical practice is moving from diagnostics to prognostics and on the micro evidences and to evidences based medicine. The growth of number of medical bibliographic databases and other research sources all underline the importance of being able to search for up-to-date information effectively in the present context. The demand from simple bibliographic references is changing to the full text and with the most relevant and specific content. The recent concept of “knowledge management services” visualized by many database vendors is the evidence as how new facilities and services are sought by the end users. Because of an increasing amount of

information, the constant updating and revision within the discipline has become imperative and a variety of innovative services are now made available to those seeking information and must precisely define what kind of information they are looking for and from which sources the information needed may be found and where they are located.

2. OBJECTIVE OF THE STUDY

The objectives of the present study are:

- To identify the attitude skills and knowledge of health science professionals in meeting the user needs both in electronic and print environment.
- To study the methodologies adopted by them for providing information.
- To study the various knowledge level in proving health sciences information to the health sciences professionals.
- To evaluate the usefulness of the information services to the faculty members.
- To measure the ability of knowledge in dealing the e-resources to the users.
- to study the knowledge gaps in participation of various methods including professional developments.
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3. REVIEW OF LITERATURE

Knowledge Management is a process aimed at creating, identifying, sharing and using knowledge at the level of an organization. Knowledge management in Academic Institutions can be applied in five key areas such as research, curriculum development, alumni services administrative services and strategic planning (Kidwell et al. 2000). According to Townley (2001), librarians have developed and applied many KM principles in the provision of library services. Reference, cataloging, and other library services are designed to encourage the use of scholarly information and thus increase the amount of academic knowledge used in higher education. Academic libraries are part of the university and its organizational culture. Whatever affects universities has an impact on academic libraries. As a result, role of academic libraries is voluminous to provide the competitive advantage for the parent organization. The success of academic libraries depends on their ability to utilize information and knowledge of their staff to better serve the needs of the academic community. Academic Libraries are pinched on both sides: reduced budget and increased demand from faculty and students. It is, therefore, paramount for academic libraries to operate more efficiently with reduced financial and human resources. Knowledge Management is considered as one of the most useful solutions for academic libraries that can be adopted in order to improve their services to become relevant for their parent institutions in the present competitive and challenging environment (Wen, 2005; Thanuskodi, 2010). This is especially true of countries 12 Dr. R. Poonkothai like India with a rapidly developing economy. Knowledge Management is a viable means in which academic libraries could improve their services in the knowledge economy. The article by Parirokh et al. (2006) is one of the few papers specifically allocated to knowledge sharing requirements in academic libraries. They conducted research to identify the knowledge sharing requirements of reference librarians in university libraries. The results of their survey of mostly American university reference librarians, showed that the majority of libraries investigated were quite positive about knowledge sharing, and that the majority of librarians valued the importance of knowledge sharing. The results also confirmed that the knowledge that they used most was mainly intangible knowledge. However, KM and knowledge sharing initiatives had not been institutionalized in the majority of those academic libraries that participated in the study. They also noted that providing a variety of communication channels for librarians might enhance both the efficiency and effectiveness of their communication and any subsequent knowledge sharing activities.

4. RESEARCH METHODOLOGY

The present study, questionnaire method was used for data collection. The Questionnaire methods were adopted to collect the information to understanding of an area which research intended to collect data from the respondent. Total 20 colleges were selected by researcher and was sent as an email attachment and post to all the library professional staff. In addition to responding to general questions the participants were asked about the knowledge and skills in the subject, relating to day to day managing the library services.

Sample size: A sample from the 20 collages affiliated to Rajiv Gandhi University of health Science and divided geographically namely Belgaum, Gulbarga, Mysore and Bangalore. Samples from all the collages of regions were taken to find out the opinion about the knowledge and skills by the library profession. The table (1) illustrates the distribution of knowledge and skills designation wise.

5. DATA ANALYSIS

The finding of the study are summarized and presented here with tables.

Table 1: Distribution of knowledge and skills designation wise

Subjects	Chief Librarian	Senior Librarian	Librarian	Deputy Librarian	Assistant Librarian	Total
Medical	8(36%)	2(8%)	1(4%)	1(4%)	5(20%)	17(68%)
Dental	2(8%)	1(4%)	3(4%)	-	-	5(20%)
Others	1(4%)	1(4%)	1(4%)	-	-	3(12%)
Total	11(44%)	4(16%)	4(16%)	1(4%)	5(20%)	25(100%)

The above table shows that 68% of the total population under study consists of medical, 20% dental, 12% of those belongs to other category.

Table 2: Distribution of knowledge and skills on Experience

Subjects	1-5 Years	6-10 Years	11-20 Years	20+Years
Medical	2(8%)	2(8%)	5(20%)	8(32%)
Dental	-	1(4%)	2(8%)	2(8%)
Others	-	-	2(8%)	1(4%)
Total	2(8%)	3(12%)	9(36%)	11(44%)

Table 2 shows that 32% respondents belong to medical librarians and 8%, dental and 4% dental. It shows majority of respondents are medical fields.

Table 3: Knowledge and skills about medical databases

Aspects	Greater extent	Some extent	Little extent	Neutral	Not at all	Chi-square	p-value
Medicine/Pub Med	17(68%)	6(24%)	1(4%)	-	1(4%)	14.48	0.001*
PsycINFO	1(4%)	9(36%)	6(24%)	4(16%)	5(20%)	6.80	0.147
OVID	12(48%)	10(40%)	2(8%)	-	1(4%)	14.84	0.002*
Cochrane Lib.	6(24%)	10(40%)	6(24%)	1(4%)	2(8%)	14.84	0.002*
MedINDindMED	11(44%)	7(28%)	3(12%)	1(4%)	3(12%)	8.12	0.044*
EBSCO	9(36%)	4(16%)	7(28%)	2(8%)	3(12%)	6.80	0.147
Science Direct	15(60%)	6(24%)	2(8%)	-	2(8%)	8.24	*.016*
ProQuest	12(48%)	11(44%)	-	-	2(8%)	7.28	0.026*
MD Consult	13(52%)	11(44%)	-	-	1(4%)	9.92	0.007*
GoogleScholar	12(48%)	6(24%)	3(12%)	1(4%)	3(12%)	9.72	0.021*
NHS Evidence	2(8%)	7(28%)	7(28%)	3(12%)	6(24%)	14.20	0.003*
EMBASE	4(16%)	6(24%)	7(28%)	3(12%)	5(20%)	2.00	0.736
MedlinePlus	8(32%)	10(40%)	3(12%)	1(4%)	3(12%)	7.16	0.067
TRI	2(8%)	7(28%)	7(28%)	4(16%)	5(20%)	13.56	0.004*
CINAHL	3(12%)	5(20%)	8(32%)	5(20%)	4(126%)	5.24	0.155
GP Med	4(16%)	5(20%)	8(32%)	5(20%)	3(12%)	5.24	0.155
DynaMed Plus	3(12%)	5(20%)	10(40%)	3(12%)	4(16%)	3.32	0.345
Pubmedcentral	13(52%)	7(28%)	1(4%)	2(8%)	2(8%)	12.60	0.006*
DOAJ	11(44%)	7(28%)	3(12%)	2(8%)	2(8%)	6.20	0.102
OUP	17(68%)	3(12%)	3(12%)	1(4%)	1(4%)	14.48	0.001*
J-Gate	9(36%)	11(44%)	1(4%)	2(8%)	2(8%)	10.040	0.018*
Springer Link	11(44%)	6(24%)	7(28%)	-	1(4%)	8.12	0.044*
Jaypeedigital	11(44%)	7(28%)	4(16%)	1(4%)	2(8%)	13.20	0.010*
ProQues	9(36%)	5(20%)	7(28%)	1(4%)	3(12%)	8.00	0.092
Lippincott	11(44%)	3(12%)	7(28%)	1(4%)	3(12%)	8.12	0.044*
Wiley e Library	12(48%)	4(16%)	5(20%)	2(8%)	2(8%)	7.16	0.067

Table 3 shows that maximum percentage 68% Medline/pub med users, 12% ovid only 4% psycho info databases. Chi square shows 14.48 majority of the users are familiar in the knowledge of databases.

Table 4: Knowledge and skills for management of Health Science Libraries

Aspects	Greater extent	Some extent	Little extent	Neutral	Not at all	chi	p
e-journals	15(60%)	9(36%)	1(4%)	-	-	11.84	0.003*
ETDs	6(24%)	11(44%)	2(8%)	6(24%)	-	7.28	0.026*
Open access resources	18(72%)	3(12%)	3(12%)	-	1(4%)	18.32	0.001*
Consortia	8(32%)	13(52%)	1(4%)	2(8%)	1(4%)	15.66	0.001*
Subject gateways	9(36%)	11(44%)	2(8%)	2(8%)	1(4%)	3.25	0.197
Translation service	7(28%)	10(40%)	2(8%)	5(20%)	1(4%)	10.8	0.029*
DDS	10(40%)	9(36%)	3(12%)	3(12%)	-	1.04	0.595
Union catalogue	9(36%)	8(32%)	4(16%)	2(8%)	2(8%)	3.32	0.345
Library finance	13(52%)	9(36%)	2(8%)	-	1(4%)	15.8	0.001*
Time management	14(56%)	8(32%)	1(4%)	2(8%)	-	17.4	0.001*
Library marketing	10(40%)	8(32%)	2(8%)	1(4%)	4(16%)	12.0	0.017*
Human resource arrangement	10(40%)	3(12%)	7(28%)	2(8%)	3(12%)	5.24	0.155
Prof. ethics	12(48%)	7(28%)	4(16%)	2(8%)	-	8.85	0.012*
Internet searching skills	13(52%)	6(24%)	3(12%)	2(8%)	1(4%)	18.8	0.001*
Information literacy skills	11(44%)	10(40%)	2(8%)	1(4%)	1(4%)	11.6	0.009*
Presentation skills	10(40%)	11(44%)	3(12%)	1(4%)	-	11.96	0.008*
Writing skills	9(36%)	12(48%)	3(12%)	1(4%)	-	12.6	0.006*
Reporting skills	13(52%)	7(28%)	4(16%)	1(4%)	-	12.6	0.006*
Communication skills	12(48%)	9(36%)	3(12%)	1(4%)	-	12.6	0.006*
Negotiation skills	12(48%)	7(28%)	3(12%)	1(4%)	2(8%)	16.4	0.003*
Leadership skills	16(64%)	5(28%)	3(12%)	1(4%)	-	21.56	0.000*

Table 4 shows that, 72% respondents knowledge in open access handling, 60% e-journals 13% internet searching. Followed by maximum percentage belongs to writing skills, negation skills, it shows health science library profession are well equipped in handling resources.

Table 5: factors motivate you for acquiring knowledge and skills on the job

SN	Particulars	Yes	No	Chi-square	P-value
1	To get recognition in the profession	24(96%)	1(4%)	21.16	0.000*
2	To get recognition in the organization	19(76%)	6(24%)	6.76	0.009*
3	To be a leader in the profession	22(88%)	3(12%)	14.44	0.000*
4	To help fellow LIS professionals	24(96%)	1(4%)	21.16	0.000*
5	To motivate other LIS professionals	22(88%)	3(12%)	14.44	0.000*
6	Out of passion	10(40%)	15(60%)	1.00	0.317
7	For career advancement	19(76%)	6(24%)	6.76	0.009*
8	For better financial prospects	16(64%)	9(36%)	1.98	0.162
9	For individual recognition	14(56%)	11(44%)	.360	0.549

Table 5 shows that all users response that library staff factors motivate in handling knowledge skill in the job. 96% of the respondents said that to get recognition in the profession, followed by to help fellow in LIS professionals. 88% respondents said that to motivate other LIS profession. 56% respondents said that for individual recognition and the table 6 depicts that maximum no of respondents 68% said that greater extent in using computer and related items in competencies skills development 28% in proficiency in academic search engines and proficiency in bibliographic databases

Table 6: Competencies in Skills Development

SN	Aspects	Greater extent	Some extent	Little extent	Neutral	Not at All	Chi-square	P-value
1	Computer operating skills are very much needed for health science librarians	17(68%)	7(28%)	1(4%)	-	-	15.68	0.000*
2	Proficiency in commercial integrated library management software is very important for health science librarians	8(32%)	12(48%)	5(20%)	-	-	2.96	0.228
3	Proficiency in achieves/ Institutional Repositories is very important for health science librarians	9(36%)	11(44%)	4(16%)	1(4%)	-	10.4	0.018*
4	Proficiency in digital library software important for health science librarians	7(28%)	10(40%)	8(32%)	-	-	.560	0.756
5	Proficiency in Blogging software packages important for health science librarians	7(28%)	9(36%)	9(36%)	-	-	4.84	0.028*
6	Proficiency in scanning (OCR)	10(40%)	7(28%)	7(28%)	1(4%)	-	10.64	0.005*
7	Proficiency in Wikis	8(32%)	6(24%)	10(40%)	1(4%)	-	7.16	0.067
8	Proficiency in Internet search Engines	9(36%)	12(48%)	4(16%)	-	-	3.92	0.141
9	Proficiency in Academic Search Engines	12(28%)	10(40%)	3(12%)	-	-	5.36	0.069
10	Proficiency in Bibliographic Databases	12(48%)	9(36%)	4(16%)	-	-	3.92	0.141
11	Ability to Develop and Evaluate wed content	8(32%)	13(52%)	4(16%)	-	-	4.88	0.087
12	Knowledge of medicine as a field of study its mapping	10(40%)	8(32%)	6(24%)	1(4%)	-	7.16	0.067

6. CONCLUSION

Communication and preservation of the knowledge to achieve success in their field as well as enhancing knowledge and skills, proficiency in the subject. The study suggests that a good health condition environment in organization should provide to update and restructuring intuitional environment in health sector. Rapid changes, driven by information and communication technologies, are influencing in the context of knowledge management.

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