Barriers When Advocating or Providing Information Literacy Instruction in Medical Institutions of Pakistan

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This study aims to identify the factors which hinder the implementation of IL instructions programmes or prevent their systematic development in Pakistani medical institutions. This study adopted a two-phase, sequential mixed method research design. In first phase, head librarians of all (114) academic medical institutions in Pakistan were surveyed. Response rate was 61.5 %. In second phase, 20 purposively selected head librarians were interviewed. There was a consensus between the head librarians employed at public and private sector medical institutions that out of 12 barriers identified in this study, "lack of training opportunities for IL instruction for librarians" and "lack of policy regarding IL instruction in the medical institutions" were the two most significant barriers to IL instruction programmes in medical institutions. These findings suggest future direction for pre- and in-service education of librarians to prepare themselves to provide IL instruction. A clearly stipulated IL policy may be formulated and implemented in all medical institutions. The findings of this study are expected to enable medical librarians to be more aware of the barriers while planning and providing IL instruction in medical institutions.

Keywords Information literacy instruction; Barriers; Medical institutions; Pakistan.

Introduction

The ability to successfully, retrieve, organize, evaluate and effectively use information for completion of any task is called information literacy (IL) (Bruce, 2004). The mission of IL instruction programme in an academic institution is to ensure that students and faculty members are information literate (Bruce, 2004; Bhatti, 2012). Our previous study (Ullah & Ameen, 2015) provides the detailed background information on the subject and reveals that IL instruction practices in medical libraries of Pakistan were at initial stage and most of the medical libraries provide library orientation or instruction in basic IL skills. Therefore, to identify the main constraints that exist in the medical institutions is critical to enabling librarians to provide IL instruction in more systematic way.

Purpose of the Study

The purpose of this study was to identify the factors which hinder the implementation of IL instruction programmes or prevent their systematic development in Pakistani medical institutions. The findings of this study are expected to enable medical librarians to be more aware of the barriers while planning and providing IL instruction in medical institutions.

Research Questions

This study was designed to answer the following research questions: (1) What are the barriers while advocating or providing IL instruction in medical institutions? ; (2) What are the differences among the opinions of head

librarians employed in different medical institutions, funded by the public and private sectors?

Literature Review

The implementation of IL instruction programmes in academic institutions demand a paradigmatic shift in educational system. Barnard, Nash and O' Brien (2005) noted that "...there are also the difficulties in establishing the necessary momentum for change amongst educators who may already feel over-burdened with on-going tasks and over-increasing responsibilities in a resource-poor environment" (p. 9). Johnston and Webber (2003) found that lack of teaching and assessment skills among librarians, less influence of librarians in curriculum designing and limited time for IL instruction were the most significant problems in imparting IL instruction in developed countries. Fafeita (2006) revealed that insufficient resources; lack of interest of management, teachers and students; lack of training facilities; and lack of IL awareness among teachers were the main barriers in IL instruction in Australian TAFE libraries. McGuinness (2009) found that Irish librarians faced many obstacles while embedding IL instruction within curricula. The most common among those were lack of IL policy in most of the institutions, lack of IL training and use of traditional instruction methods. O'Brien and Russell (2012) expressed that the absence of national cohesive strategy for IL at the highest level, lack of collaborative thinking among all stakeholders, and lack of understanding about IL outside of the library arena were the main challenges for IL development in Ireland. The barriers in IL instruction identified in earlier surveys as well as carried out in developing countries include: limited resources (such as budget, facilities, suitable staff), lack of IL policy, deficiencies in staff training, lack of basic IT skills, lack of guidance, difficulties in obtaining support from management and teaching faculty and the disinterest of the government (Baro & Zuokemefa, 2011; Islam & Rahman, 2014; Lwehabura & Stilwell, 2008; Jabeen, Yun, Rafique, Jabeen & Tahir, 2014; Jiyane &

Onyanchas, 2010; Karisiddappa & Rajgoli, 2008; Ranaweera, 2010). Ashoor (2005) identified "traditional education system," low literacy rate" and "low level of publishing" as the major problems, prevailing in the developing countries, in the way towards the development of IL programmes. Ameen and Gorman (2009) identified lack of IL trained library staff and less emphasis of policymakers on IL skills if compared to ICT infrastructure were the main barriers in IL programmes in Pakistan. Bhatti (2012) identified that lack of IL policy, lack of assessment of user's information needs, inadequate IL training of librarians and lack of research on IL, low interest of faculty and students, and lack of dedicated budget for IL instruction were the main barriers in the execution of IL programmes in Pakistani universities. In this sense, no study on the barriers to IL instruction in medical institutions is carried out in Pakistan so far.

Methodology

This study adopted sequential mixed methods of research design and used quantitative and qualitative data collection methods. In the first phase, by the use of semi-structured questionnaire, quantitative data was collected from the head librarians of all 114 medical institutions, recognized by Pakistan Medical and Dental Council (PMDC). The questionnaire was delivered by postal mail to the head librarians. The respondents were presented with a list of 12 pre-defined barriers and an open-ended "any other barriers" option at the end in the questionnaire. They were asked to indicate their level of agreement with the possible barriers faced by them while advocating or providing IL instruction in medical institutions on a scale of 1 (strongly disagree) to 5 (strongly agree). The data was analysed through the uses of SPSS. Independent-samples t-test was applied to examine whether there were significant differences among opinion of head librarians employed in public and private sector medical institutions. One-way ANOVA was applied on composite mean scores of respondents, in order to know whether there were significant differences among the opinions of head

librarians who belong to the three groups based on type of institutions (medical colleges, medical universities and postgraduate medical institutes).

When quantitative data was analysed and reported, twenty head librarians were also interviewed who had comparatively better understanding of IL instruction. These interviews were conducted to get detailed comments on the survey results. As a primary source of data all face-to-face and phone interviews, with consent, were audio recorded and transcribed. The textual data was content-analysed and coded. The emerged themes and subthemes were presented with frequency of their occurrences along with the interpretation, comments, and quotes from the transcripts.

Findings

Analysis of Quantitative Data

Sixty-nine useable responses were received with 60.5 % response rate. Out of 69 respondents 52 (75.4 %) were males and 17 (24.6 %) were females. A total of 31 respondents (44.9 %) were from public sector medical institutions and 38 (55.1 %) were from private sector medical institutions. Forty-four (63.8 %) respondents were employed in medical colleges, 14 (20.3 %) in postgraduate medical institutes, and 11 (15.9) in medical universities. The perceptions of head librarians from public and private sector medical institutions about each barrier in the form of mean, standard deviation (SD) and rank are presented separately in Table 1. The statements were ranked from highest to lowest according to the mean score. In case of a tie, the IL skills with the low standard deviation were ranked higher. Table 1 also provides the t-test significance value (p value)

Table 1

Barriers to IL Instruction Programmes Along with t-test Results

S. No.	Barriers	Sector	N	Rank	Mean	SD	Sig. (2-tailed)
1	Lack of training opportunities for IL instruction for librarians	Public	31	1	4.39	.715	.150
		Private	38	2	4.11	.863	
2	Lack of policy regarding IL instruction in the medical institutions	Public	31	2	4.23	.762	.649
		Private	37	1	4.30	.520	
3	Lack of collaboration between librarians and faculty	Public	29	3	4.07	.961	.329
		Private	38	4	3.84	.916	
4	Management is interested more in developingphysical infrastructure than IL instruction	Public	30	4	4.03	.928	.110
		Private	38	5	3.66	.966	
5	Lack of awareness regarding the importance of IL instruction among medical community	Public	31	5	3.94	.929	.150
		Private	38	7	3.61	.946	
6	Shortage of library staff to provide IL instruction	Public	31	6	3.90	1.012	.336
		Private	38	6	3.66	1.072	
7	IL instruction is not part of the curriculum	Public	31	7	3.74	1.094	.293
		Private	37	3	4.00	.913	
8	Lack of IL expertise among medical librarians	Public	31	8	3.68	1.013	.692
		Private	38	8	3.58	1.030	
9	Lack of time by librarians due to professional work	Public	31	9	3.65	1.199	.107
		Private	38	11	3.18	1.136	
10	Lack of commitment among librarians for IL instruction	Public	31	10	3.45	1.028	.713
		Private	37	9	3.35	1.184	
11	Lack of interest of users	Public	30	11	3.37	1.033	.923
		Private	38	10	3.34	1.047	
12	Library being part of administration not academics	Public	27	12	3.19	1.178	.600
		Private	32	12	3.03	1.062	

All the respondents agreed with 12 statements regarding barriers to IL instruction programmes, however, the head librarians from public sector institutions strongly agreed to following four statements: "lack of training opportunities for IL instruction for librarians", "lack of policy regarding IL instruction in the medical institutions", "lack of collaboration between librarians and faculty" and "management is more interested area than IL instruction in developing physical infrastructure" were ranked first, second, third and fourth respectively. The

other eight statements (S. No. 5 to 12) got mean score ranging from 3.94 to 3.03.

The head librarians from private sector medical institutions strongly agreed to only three statements (S. No. 1, 2, 7) and other twelve statements received mean scores between3.84 and 3.03.

There was a consensus between the public sector and private sector respondents that "lack of training opportunities of IL instruction for librarians" and "lack of policy regarding IL instruction in the medical institutions" was the two most important barriers to IL instruction programmes in medical institutions.

Independent samples t-test results. The results reveal that mean scores of two groups of head librarians on all 12 barriers were not significant at the alpha level of 0.05 (Table 1). This means that sector of institution has no effect on the opinion of respondents.

One-way ANOVA results. It was revealed that no significant differences were found among the opinions of head librarians employed in three types of institutes (F (2) = .762, Sig. = .471). This means that type of institution has no effect on the opinion of respondents.

Analysis of Interview Data

Out of 20 interviewees 15 were males and 5 were females; 12 were employed in private sector and 8 in public sector medical institutions; 11 were working in the medical colleges, 5 in postgraduate medical institutes and 4 in medical universities. The interviewees were asked to give their comments on the results of the questionnaire survey which had revealed that "lack of training opportunities for IL instruction for librarians" and "lack of policy regarding IL instruction in the medical institutions" were the

top two barriers that effect development of IL instruction programmes in medical institutions. These participants were also asked to enlist other barriers that effect IL instruction in their institutions. All the interviewees agreed that most of the medical librarians had inadequate knowledge of IL due to the limited IL training opportunities in Pakistan. If librarians are themselves not trained, how they can tutor the faculty and educate their users." Another stated, "Librarians do not learn new skills and are not updated." Some interviewees acknowledged that many librarians had not attended any course in IL. The interviewees were in agreement that the lack of an IL policy in medical institutions is an obstacle for development of IL instruction. All the interviewees emphasized that an IL policy which could provide guidelines and direction for implementation of IL instruction in the medical institutions might be formulated. One participant stated, "At present there is no [IL] policy in most of the institutions, the librarians need stress upon the administration and the designers of the curriculum as well to formulate it." Another acknowledged, "Neither the librarians nor the end users are well versed with the importance of IL skills, until they are apprised of it. IL policy cannot be formulated." One interviewee criticized, "Many medical institutions do not even have a permanent library policy, what to talk about IL… IL policy is crucial to the success of IL programmes." In response to the question regarding the barriers that affected IL instruction in their respective institutions, the interviewees very openly discussed the obstacles and barriers in this regard. Various barriers, mentioned by interviewees are presented in Table 2 along with frequency of their occurrences in the interview texts.

Table 2

Barriers When Advocating or Providing IL instruction (N = 20)

Barriers	Frequency
Lack of support from the management	7
Shortage of the professional library staff	6
Neither the faculty nor the students are well versed with the importance of IL skills	5
Librarians indulge in non-professional work/administrative duties	3
Medical students are already overloaded and do not have time for IL instruction	3
Non-faculty status of Librarians	2
Lack of resources and infrastructure	1
Librarians are not involved in curriculum designing	1
Librarians are not expected to run IL instruction	1
Public sector institutions want to maintain status quo	1

The analysis of responses (Table 2) revealed that participants faced many barriers while offering IL instruction in their institutions. They have been unsuccessful in convincing and getting support from the management needed in this regard. A very few institutions hire library staff required for the Pakistan Medical and Dental Council (PMDC) recognition. Even the PMDC practices for recognition of medical institutions and inspection criteria have not done much in this regard. Hence, shortage of library staff has added to non-effectiveness of IL instruction. A few of the interviewees have also mentioned that in addition to their actual duties they are given assignments due to which their attention is diverted. So they cannot concentrate on their professional tasks. One head librarian of public sector institution stated, "…our institution does not have library staff which is required for the PMDC recognition, I am the only librarian and has to perform all duties… I can hardly spare time for IL instruction." Another head librarian simply stated, "…I am the only librarian in our institution and mostly perform general administrative duties other than library work." In addition, he lacks of awareness regarding importance of IL skills on the part of the librarians, management, medical faculty and students, heavy load of academic and clinical activities among medical students also affect the IL instruction programme. Lack of resources, non-faculty status of librarians, lack of librarians' involvement in curriculum designing and status quo at the public sector institution also are barriers in IL instruction.

The qualitative data strengthens the questionnaire survey results and confirms that the above mentioned obstacles hinder the implementation of IL instruction programmes in the medical institutions of Pakistan.

Discussion

In Pakistan, the problems besetting the IL instruction are many. Both quantitative and qualitative findings disclosed that lack of policy regarding IL instruction in the medical institutions and lack of training opportunities for IL instruction librarians are the most significant barriers that may continue to impede IL initiatives in Pakistani academic medical institutions. In these regards, our findings are similar to those revealed in the studies carried out in Irish Republic and Tanzania (Lwehabura & Stilwell, 2008; McGuinness, 2009). Moreover, other barriers such as lack of librarian-faculty collaboration, more emphasis of management in developing physical infrastructure than IL instruction, shortage of library staff, IL instruction being not part of the medical curriculum, lack of time and lack of pro activeness and strong advocacy for IL among librarians is also creating impediments to IL activities. These barriers are consistent with the impediments identified by many scholars in other developing countries (Ashoor, 2005; Baro & Zuokemefa, 2011; Karisiddappa & Rajgoli, 2008; Lwehabura & Stilwell, 2008; Ranaweera, 2010). Ameen and Gorman (2009) reported the same barriers in Pakistani academic institutions along with more emphasis of the government on ICT infrastructure than IL. Bhatti (2012) also highlighted the barriers such as lack of IL policy, lack of assessment of the information needs of the users, inadequate IL training of librarians and lack of research on IL, low interest of faculty and students, and lack of dedicated budget for IL instruction in Pakistani universities.

There are many factors which are responsible for the non-implementation of IL instruction in academic medical libraries and also for preventing their systemic development. The first step in seeking solutions is to find out the causes of our problems, so that they can be gradually rooted out. However, solutions are not always easy to arrive at as many times they involve factors and issues which are beyond our own control. If we look at our education system as a whole the conditions are not conducive for imparting IL instruction to the end users. Therefore, a brief analysis of these conditions, we think, will help in analyzing these constraints in the way of the development of IL instruction programmes. Constraints are found in all activities and in most cases they serve as stimulants to improvements. It is important that people must seek solutions and not get discouraged. However, without clear policy guidelines the road will always be jumpy (Bruce, 2004).

Conclusions and Recommendations

Lack of IL training opportunities for librarians and lack of IL policy in the medical institutions are the huge barriers that need to be breached. Lack of collaboration between librarians and faculty; lack of interest and awareness regarding importance of IL instruction among management, faculty and students; and lack of pro-activeness among librarians also impede the delivery of IL instruction in medical institutions. These impediments potentially have significant consequences for the long term sustainability of IL instruction in medical institutions. The findings of the present study suggest that leaders in the medical information services should take responsibility, for overcoming the impediments, to train their library users more effectively. If they do not show pro-activeness, the sustainability of their health information services in the current environment will be lost.

These findings suggest future direction for pre- and in-service education of librarians to prepare themselves to provide IL instruction. Librarians need to adopt proactive approach regarding the creation of an in-depth awareness about importance of IL skills among various stakeholders such as management, faculty and students. A clearly stipulated IL policy may be formulated and implemented in all medical

institutions. In this regard, the accredited agencies such as the HEC and the PMDC can play a pivotal role.

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