

## Virtual in-service training from the librarians' point of view in libraries of medical sciences universities in Tehran

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### Abstract

**Background:** In-service training courses are one of the most available programs that are used to improve the quantity and quality level of the staff services in various organizations, including libraries and information centers. With the advent of new technologies in the field of education, the problems and shortcomings of traditional in-service training courses were replaced with virtual ones. This study aimed to evaluate the virtual in-service training courses from the librarians' point of view in libraries of state universities of medical sciences in Tehran.

**Methods:** This was a descriptive- analytical study. The statistical population consisted of all librarians at libraries of universities of medical sciences in Tehran. Out of 103 librarians working in the libraries under the study, 93 (90%) participated in this study. Data were collected, using a questionnaire.

**Results:** The results revealed that 94/6% of librarians were satisfied to participate in virtual in-service training courses. In this study, only 45 out of 93 participants said that the virtual in-service courses were held in their libraries. Of the participants, 75.6% were satisfied with the length of training courses, and one month seemed to be adequate time duration for the librarians to be more satisfied. The satisfaction level of the individuals who participated in in-service courses of the National Library was moderate to high. A total of 84.4% participants announced that the productivity level of the training courses was moderate to high. The most important problem with which the librarians were confronted in virtual in-service training was the "low speed of the internet and inadequate computer substructures".

**Conclusion:** Effectiveness of in-service training courses from librarians' point of view was at an optimal level in the studied libraries.

**Keywords:** In-Service Training, Virtual in-Service Training, Librarians, Libraries.

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### Introduction

Undoubtedly, the most important goal in any organization is to reach the maximum efficiency, effectiveness and productivity, and this will not be achieved unless the educational systems and tools are employed as the inevitable components of the contemporary management (1). Nowadays, nobody can deny the significant role of in-service training courses. Each organization assigns some centers to educate the human

forces based of the degree of significance they attribute to it (2). In-service training would increase new knowledge and add it to previous knowledge of the learners. It can be considered as an integral part of constant training, which people require to play their role in social relationships. Changing the interactional features and cooperation among the colleagues, enhancing and creating appropriate behaviors, raising forces for attracting the new positions and

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jobs, and improving the skills to use new methods are considered as the main advantages of holding in-service training courses (3). Since in-service courses for employed individuals might cause such problems as simultaneity of working time and class time, higher extent of commuting in the city, and increasing the marginal expenses, holding virtual in-service training courses would hopefully minimize the expenses. Many studies have shown that electronic learning is as effective as traditional learning and may be even more efficient and satisfying to the participants (4).

In a study, the viewpoints of the staff members in Mashad University of Medical Sciences were examined with regards to offering online in-service training courses. The findings indicated that a considerable proportion of the staff members confirmed this educational method and agreed on its efficiency (5). Indeed, virtual training lacks temporal and spatial limitations, and its learning context is more flexible and accessible for the learners so that they are provided with an appropriate context for learning educational content and develop their professional skills (6). No limitation in the number of learners, lower expenses in maintaining and managing the virtual training systems than those of the traditional training, and other advantages of virtual training had led to employing this kind of training for in-service training courses (5). Development of science and technologies, the variety of scientific fields of study, and developing needs of the user society have made it more difficult to be prepared as a librarian in the field of library and Information Science (7). Considering the new information and communication technologies in the libraries and a change in the users' information search behavior and the emergence of new expectations, librarians should be prepared to communicate with different groups to offer more appropriate services. This would be possible through holding in-service training courses (8). Traditional libraries should adapt to the new technologies in today's world; hence,

holding virtual courses seems to be the best way to globalize the ultimate goal of training and to increase the scientific level of the librarians' society (9).

In a study, the possibility of distance learning for the librarians working in central libraries of universities of Ministry of Health and Medical Education in Tehran through internet or by post was investigated. The findings indicated that 95% of the librarians were interested in participating in training courses over the internet. Educational websites and chat rooms had the highest and lowest percentage in the intended method for presenting the courses. More than half of the librarians (72%) confirmed that their libraries were equipped to hold in-service courses; however, 21% confirmed the necessity of allocating a budget to the libraries for holding these courses. Most librarians were somehow familiar with "cataloging electronic sources" and "knowledge management". "Authorities' lack of agreement and trust in acknowledging these courses", "technical problems", and "low speed of the internet" were mentioned as the main problems. Finally, it was found that the libraries under the study had the potential facilities and required capabilities to hold training courses libraries and information science through the internet (7). Shahrzadi and Mojiri analyzed the needs of librarians' in-service training courses in Isfahan universities and found that the highest extent of their needs was related to familiarity with the searching method on the internet, principles of the librarians' communicative skills, familiarity with the databases and searching them, and research methodology in library and information sciences (3). The procedures for presenting in-service training to the librarians were as follows: Needs analysis, determining the objectives of in-service training, the kind of required training, determining the training time, educational methods, various types of methods, planning training courses, preparing the implementation plans for training, and assessing training (8). Akpam et al assessed the in-service

training needs of library staff in Enugu campus in a Nigerian University and found that all respondents agreed to take educational courses to enhance information dissemination to the users, present appropriate assistance to the users, play a better role in the relevant sections, provide better communicative skills, receive training on the employed tools in processing the library sources, teach information and communication technologies, and write research. In this study, those obstacles on the way of holding in-service training were presented including lack of support of the source institute, temporal limitations, inadequate budget, and lack of written educational policies, inadequate qualification, limited educational plan, and inadequate educational sources (10).

As no fundamental or codified plan exists for updating the knowledge of the employed librarians, a virtual in-service training seems to be an appropriate strategy for updating the experts' knowledge in the field of library and information sciences. It is noteworthy to mention that no study has yet touched upon this issue. This study aimed at investigating the virtual in-service training courses from the librarians' point of view in libraries of universities of medical sciences in Tehran.

### Methods

A descriptive-analytical method was used applied study. The context was the libraries of universities of medical sciences in Tehran. The instrument of the study was a questionnaire. The statistical population of the study consisted of all the librarians working in the libraries under the study.

Seven cases out of 35 libraries belonged to the central library, and 28 were college libraries. Due to the limited statistical population (103 participants), polling method was used to elicit information from the respondents. The universities included Iran University of Medical Sciences, Tehran, Shahed (Nursing and Midwifery, Medicine, and Dentistry faculties), Shahid Beheshti, University of Social Welfare and Rehabilitation Sciences, Army, and Baghiyatallah. The instrument was a reliable and valid questionnaire, which was adapted for this study (11). The questionnaire was distributed among the librarians at the libraries under the study. The list of universities of medical sciences in Tehran was taken from the website of Ministry of Health and Medical Education. SPSS and descriptive statistics were used for data analysis. The information included in the questionnaires was kept confidential by the researcher.

### Results

According to the findings, 4.5% (5 participants) of the participants had diploma and 3.3% (3 participants), 7.45% (42 participants), 6.44%, and 1.1% (41 participants) had Associate degree, BA, MA, and PhD, respectively. There were 8 participants (42.7%) with a degree in medical librarianship, and 56.2% with a degree in public librarianship. The results indicated that 87 participants (94.6%) were willing to take part in virtual in-service courses. Among the respondents (93 participants), only 45 stated that virtual in-service courses were held in the libraries where they were working. As demonstrated in Table 1, the highest number of courses was held in Tehran

Table 1. Holding Virtual InService Courses in the Libraries

University	Holding Virtual In-Service Courses in the Libraries		Total
	No	Yes	
Iran University of Medical Sciences	7 (14.6%)*	12 (26.7%)	19 (20.4%)
Tehran University of Medical Sciences	6 (12.5%)	27 (60.0%)	33 (35.5%)
Shahed	9 (18.8%)	1 (2.2%)	10 (10.8%)
Shahid Beheshti University of Medical Sciences	19 (39.6%)	4 (8.9%)	23 (24.7%)
University of Social Welfare and Rehabilitation	3 (6.3%)	1 (2.2%)	4 (4.3%)
Army University of Medical Sciences	2 (4.2%)	0 (0.0%)	2 (2.2%)
Baghiyatallah University of Medical Sciences	2 (4.2%)	0 (0.0%)	2 (2.2%)
Total Frequency	48 (51.6%)	45 (48.4%)	93 (100.0%)

N (%)

Table 2. Virtual In-Service Courses Held in the Librarians' Workplace

Name of the Held in-Service Courses	n	%
Cataloguing, organizing, and classification the sources	28	62.2
Collection making	21	46.7
Librarianship principles	21	46.7
Digital library	27	60
Virtual reference	16	35.6
Indexing and abstracting	20	44.4
Managerial trainings	12	26.7
Searching and familiarity with the computer and databases	27	60
None	5	11.1

Table 3. The Range of Productivity of the Issues Discussed in Virtual In-Service Training Courses

Extent of Productivity	n	%
Very low	2	4.4
Low	5	11.1
Moderate	15	33.3
High	18	40
Very high	5	11.1

Table 4. The Problems with which the Individuals Were Confronted in Taking Virtual In-Service Training Courses

Problems in Taking Virtual In-Service Courses	n	%
Lack of cooperation between the library managers and librarians	3	5.2
Lack of relevant software and hardware with educational courses	13	22.4
Low speed of the internet and inadequate computer substructures	33	56.9
Lack of trust in the validity of this type of training	13	22.4
Problems related to the high fee and expenses of these courses	14	25
Lack of adequate time for taking these courses	11	19

and Iran universities of medical sciences.

Thirty-four librarians (75.6%) were satisfied with the length of the virtual in-service training courses held to date, while 11 participants (24.4%) were unsatisfied. The most appropriate length of time for holding in-service training courses was one month from the librarians' perspective.

According to the findings, among the respondents, only 10 (11.1%) participated in virtual in-service training courses in the National Library of Iran, while 80 (88.9%) had participated in no courses. The range of the participants' satisfaction with the in-service training courses of National Library was "very much" (two participants), "much" (four participants), and "moderate" (four participants).

With regards to holding virtual in-service training courses in various areas, the findings indicated that among those 45 respondents who confirmed holding virtual in-service courses in the library, 28 needed cataloguing, organizing and classification course, while 12 needed managerial trainings course.

According to Table 3, two librarians

(4.4%) stated that the extent of productivity of virtual in-service training courses was very low, while five librarians (11.1%) asserted that the productivity of those courses was very high. Most of the librarians (n=18) referred to the high extent of productivity in these courses.

As Table 4 demonstrates, "the low speed of the internet and lack of adequate computer substructures" were reported as the most important problems in taking virtual in-service courses (56.9%), while respondents considered "the lack of cooperation between the library managers and librarians" as the least important issue (5.2%).

### Discussion

Considering the results, it was found that the highest extent of holding virtual in-service training courses was observed in Tehran and Iran Universities of Medical Sciences. Other universities were not as active in holding these courses. Only 49 participants stated that virtual in-service training courses had been held in their workplaces. Considering the high significance of in-service training courses in en-

hancing the quantitative and qualitative level of the staff, the library managers should attempt to hold in-service training courses, particularly virtual classes. Only 10 participants had participated in the in-service courses of the National Library, and they were quite satisfied with these courses. Authorities should persuade the librarians to take part in virtual in-service training courses of the National Library and plan to hold these courses in high quality in the National Library. In a study by Ebrahimi Kooshk Mahdi et al., a considerable percentage of the staff confirmed on-line in-service training courses and their efficiency (5). Tavakoli concluded that participants were satisfied with all the short-term courses held in the library except for “The Theoretical Principles of Repair in Protecting and Keeping Historical and Cultural Monuments” and “Manuscripts Cataloging”. Moreover, it was found that such factors as the nature of training courses, the instructors’ dominance in the educational issues, the characteristics and features of participants in the courses, and the existence of facilities and resources and their influence on choosing the teaching method, and enhancing the quality of educational courses, and increasing the participants’ satisfaction were of prime importance (12).

Considering the findings of the study, the educational courses of “Cataloguing, Organizing, and Classifying” (62.2%), “Digital Library” (60%) and “Search and Familiarity with Computer and Databases” (60%) were held more than the other virtual courses in the libraries under the study. The extent of productivity of the issues discussed in virtual in-service training courses from the respondents’ viewpoint indicated that 85.4% of the participants (38 out of 45) who were working in libraries holding these courses, stated that the courses were of moderate to high quality, while only 15.6% of the participants (7 out of 45) expressed that the quality of the courses was low to very low. It might be concluded that most librarians believed that the courses were advantageous. Nevertheless, some

plans should be made to enhance the level of the participants’ satisfaction with the courses held in the libraries. Adapting the content of educational courses with the needs and interest of the librarians would increase the effectiveness of educational courses. In this regard, Yaghmaei Sabet demonstrated that librarians who had passed in-service training courses agreed with more analytical power to analyze their professional issues (56%). They also used the opportunities and facilities more successfully (38%). He also found that passing these courses would increase the staff’s skills in offering services (60%), and using new methods or ideas (%48) in offering services (%50), leading to the acceleration of the staff’s decision-making. In addition, 48% of the respondents believed that in-service training courses were necessary for solving real problems of the library. Finally, in-service training courses would increase the staff’s professional skills.

Considering the problems and challenges confronting librarians in taking in-service courses, most participants referred to “the low speed of the internet and inadequate computer substructures”. Moarefzade, Kamaii, and Cheraghi reported lack of money as the main issue in holding in-service courses (14). Faraji also found disagreement of authorities, lack of trust in validity of these courses, technical problems, and the low speed of the internet as the main problems of the librarians. Akpam et al. revealed that some problems hinder holding in-service courses, including lack of support from the source institute, time limitation, and inadequate budget, lack of written educational policy, limited educational program, and inadequate educational sources (10). Kokoc et al. mentioned the difficulty of using on-line technologies while learning practical skills as the only negative feature of on-line in-service training courses.

### Conclusion

The concept of effectiveness entails the degree of achieving the intended goal. Ef-

fectiveness shows to what extent the expected results were achieved due to the attempts made. From the perspective of Peter Drucker, effectiveness means doing the right thing; he sees it as the best or only way to success (16). Considering the findings related to the participants' attitudes towards taking part in virtual in-service training courses, the extent of their satisfaction with the length of the course and the productivity of the issues discussed in these courses, it might be concluded that the effectiveness of virtual in-service training courses was at the optimal level from the librarians' point of view. Through needs analysis for the virtual in-service training courses and provision of the required facilities in libraries for holding these courses, their effectiveness can be increased to a great extent.

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