

ABSTRACT

Pharmacological ICLs in academic and R&D organizations, who provide information for pharmacy students, scholars and researchers as well as decision makers, could be one of the most important centers in the process of making knowledge that is closely related to human health and welfare, where ICT could be so beneficial and necessary. The present study aimed at investigating and evaluating the use of ICT in Pharm ICLs' of Iran. More specifically the study attempted: to carry out a state-of-art of the latest ICT existing scenario in pharmacological ICLs in Iran, to identify and critically evaluate different aspects of ICT facilities available in pharmacological ICLs in Iran, to determine the use and awareness of various ICT among users, to clarify the ever changing role of Pharm ICLs and the challenges that the librarians and users encounter due to these changes, to find out the Government of Iran's policies related to ICT promotion and its implementation: problems and solutions, and also training facilities available to the users, and finally to recommend the possible model system of ICT based ICL services, particularly to pharmacology in Iran. To achieve the objectives a stratified sample survey method was used. However, the questionnaire, interviews, e-mails, and observations were used as tools to collect the data. ICLs' Questionnaires were sent to the whole selected population of ICLs (10) with the request to return the within stimulated period. However, the total population of users of these ICLs was expected to be 4220. A total number of 450 Users' Questionnaires were distributed randomly among the ICLs' members. The decided sample size is more than the double and half times of what is indicated in Krejcie and Morgan's Table (198) to strengthen the results and interpretations. The returned filled out ICLs' questionnaires were nine and the Users' Questionnaires were 380, having response rate 84.4% (380/450). The data from both sets of Questionnaires was validated, processed, tailored, classified, coded, edited and entered into the computer. The statistical analysis of the data was carried out through descriptive (frequency and percentage) and inferential statistic (Chi- Square Test) using SPSS and Excel softwares. A total

number of 74 tables and 81 figures have been used to illustrate the analyzed data.

It has been observed that most of hardware facilities are available in these ICL; however, there should be attempts to increase the number of some of these facilities to the needs of users. Electronic collections do not include sufficient e-books and e-journals. The available software, running on windows, has been developed specifically for ICLs which satisfies the needs of these centers. Telecommunication media status goes as: Intercom and telephone (in all), fax (in more than half), E-mail (in about three fourth), mobile line in none of ICLs. Network facilities observed indicates that LAN is in use in all ICLs and the peripheral equipment converted to the network are printers (in all), scanners (in more than half), CD-Drivers (in one third) and DVD-Drivers (in only 22.22%). Reprography facilities are available in two third. CD-ROMs are in use in all, CD-Writer in majority, however, DVD-ROMs and DVD-Writers are available in more than half. There are 12 International Databases among which Ovid has indicated the highest availability (88.89%), and the least available one is Toxline (22.22%). EDD is in the form of online access in all of these ICLs. Users' guideline in the use of networking is available in 66.67% of ICLs, however, the others should certainly provide them for the users. The observation of the users' awareness and use of ICT made known that majority of users locate information in online bibliographical databases. Almost all (99.2%) of respondents use computers to a great extent, also 98.7% of them use Internet. 62.3% of ICLs' members use all ICT facilities and services, and the rest (37.7%) do not use all of them but use some. Databases and e-journals have shown the highest percentage of use (81.3% and 55.8% respectively) among other information services. Information about the use of International databases have indicated that online access is the most popular method followed by manual. Science Direct is the most used database (69.2%), followed by Medline with more than 60%. The least used database is Toxline (with less than 10%). Some problems have been reported by ICLs in the application of ICT. Both lack of knowledge of LISc among computer professional and communication gap between LISc professional and computer

professional seem the most problematic issues in ICLs (each in 78% of ICLs). The cost of equipment is considered as a serious matter for consideration (44.4%) of ICLs. The problem of access control exists in about half of these centers. Computer Viruses problem has a high frequency of occurrence in majority of these ICLs (77.7%). The most problematic issues for the users in the use of ICT have been reported to be lack of training program and lack of guidebook. Users are interested in the use of ICT first for its quick access and then for its time effectiveness. A gap has been observed in the evaluation of ICT objectives by ICL staff and ICT users. ICL's staff rating is higher than the users' in all the included items. This implies the existence of gap between ICT providers and users. An ICT based model of Pharm ICLs is proposed based on the finding of the study. Based on the result of the study, it is suggested to have the provision of the sufficient fund in the Annual Budget of Government of Iran. General it is estimated 15-20% of the organizational budget for library and 20% of the ICL budget for ICT development. Government of Iran should also give special emphases and provisions for the enhancement of ICT viz tax free hardwares and softwares, free import/export duties, concession to use ICT for personal and private use. Incentives to ICT literate staff in form of promotion, increments, awards, honors, etc. The study concludes with other suggestions and implications to promote ICT facilities and services in Pharm ICLs.