MANAGEMENT OF PHARAMCEUTICAL LIBRARY AND INFORMATION CENTRE :   EMERGING ISSUES

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ABSTRACT

This paper focuses on management and identification of various emerging issues faced by Pharmaceutical science library and information centre in current library environment. The vastness and complexity of drug literature has led to information explosion. Managing the situation involve mechanism in its management as well as it include issues like quality information management, change management in this ICT infrastructure, lack of co-operation among staff members, professional and communication skill and budgetary limitation etc. all matters affect on best management practices of library and information centre of pharmaceutical science field. This matter may outcome by personal and direct and indirect response related to management of pharmaceutical science library and information centre.

KEYWORDS: Library management, Pharmaceutical science library, E-resources, Electronic libraries, Consortia, Information Technology

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INTRODUCTION

In this age of information technology there are growing areas of interdisciplinary subject, continuous modernization / improvement of techniques and changing needs of library users. To manage all these, library management is very essential and it emphasize on required to manage the library financially, personally, technologically by applying management techniques and skill. The management of pharmacy libraries, being the nerve system of pharmaceutical education, teaching and learning; play an important role in support of all the activities of the concerned pharmaceutical education. Pharmaceutical science filed is that type of field in which continuous updating is necessary as the same to know about different research is also necessary because pharmaceutical science is the filed of science dealing with collection, preparation and standardization of drugs. Pharmacist formerly mixed and measure drugs products from raw materials trough information at universal level and they also responsible for formulating, storing and providing correct dosages of medicines. The pharmaceutical science is a group of interdisciplinary areas of study involved with the design, action, delivery, disposition, and use of drugs. This field draws on many areas of the basic and applied sciences, such as chemistry (organic, inorganic, physical, biochemical and analytical), biology (anatomy and physiology, biochemistry, cell biology, and molecular biology), epidemiology, statistics, mathematics, physics, and chemical engineering, and applies their principles to the study of drugs.[1,2]

RESEARCH AND DEVELOPMENT

The research and development on pharmaceutical science consists of formulation development, Analytical development, Pre –Clinical and clinical research which provide boost to this field. Pharmaceutical science is an emerging field in the society and to the community also; as it helps the community to a greater extent, Whether the conventional study or the research in Pharma field require quality and standard knowledge and information and for that required extensive various updating e -recourses national, international reputed journals in which the recent development in this sector will published time to time. Good collection of books also necessary but can not depend fully on that, ever updating information is required. Here some issues emerging in management of pharmaceutical science library and information centre is discussed. The increasing growth in the enrolment of students and researcher, lack of proper and adequate infrastructure further aggravates the overall problems and challenges for the pharmacy libraries.

GROWTH OF INFORMATION

Drug literature is vast and complex. The very problem of defining what constitutes the literature is difficult. Drug literature is growing rapidly in size. It is also increasingly complex, i.e., interdisciplinary and interprofessional in nature. Thus, drug information sprawls across many professional journals of the most varied types. Literature on clinical experience with drug is sizable and growing. Competent evaluation of masses of drug information is particularly necessary. So these statements seem applicable even today, when the figures of more than twenty thousand biomedical journals and approximately seventeen thousand new biomedical books published annually are considered.

Management of vast quantities of medical information has challenged the disciplines of pharmacy and medicine besides the concerned Library and Information Centre. Due to the exponential rate at which information is increasing, great challenges are being faced by this profession today. Technology for storage and retrieval of medical information will continue to advance to meet these demands, resulting in greater dependence on electronic/digital information management. Today, medical information is stored on a variety of media i.e. text books, journals, newsletters, microfiche, optical disks and computer systems. Proficiency in strategies for searching this medical information is of vital importance to pharmacists and information professionals striving to meet the demands of pharmaceutical sector.

USE OF INTERNET

The vastness and complexity of drug literature has lead to information explosion. Managing such a situation involves mechanization in its management. Thus Information Technology will play a major role in information management. A technologically advanced version of drug information often denotes the electronic management of drug information. Effective management of time, distance and access to correct information through the networks is the order of the day.

The Internet is a world network of networks linked for exchange of information. The core of the network consists of computers joined through high speed connections. Part of this Internet is the World Wide Web, the web or the WWW. The web contains graphics and text documents published on the Internet that are clickable. There are other tools like Gopher, FTP, WAIS, etc for better use of Internet facilities.

As far as Pharmaceutical information is concerned, many organizations, individuals, and other interested groups have digitalized a lot of information related to pharmacy and drugs, and conveniently hosted on Internet. Parallel conventional resources also carry such kind of information. To achieve speed accuracy and to save time and distance, the information professionals and the concerned users prefer digital resources. Even as the experimental basis their works also stratify with measurement through on line software. [3, 4]

QUALITY INFORMATION MANAGMENT

Pharmaceutical education plays a very prominent role in attaining sustainable and equitable development of a country. Pharmaceutical education in India the PCI (Pharmacy Council of India) and AICTE (All India Council of Technical Education) council controls and regulates the standards for a better pharmacy education in India. More than 1000 Pharmaceutical science institutes are control under AICTE in which 748 Pharmaceutical institutes controlled and approved by PCI.[5, 6.]

All Pharmaceutical science institutes have to follow norms and standard of council and now this council also focused towards electronic information like digital library, e-resources subscription, NPTEL facility etc. in its norms for library. So need of e- resources should be follow as per users demand and try to provide quality standard e-resource facility instead of just fulfillment of norms of regulated council like AICTE and PCI. It should be quality information management.

NEED OF E - RESOURCES

Electronic publishing has led to new era of communications and information sharing .It creates opportunities for users of pharmaceutical research and development community. Information published in electronics form are easily available and its efficiency is more suitable than physical information in this rapid era but fulfill the demand of electronic information comparatively become costly for individual as the same it's very necessary to follow quick and updated available information in such as field of pharmaceutical science.

SELECTION OF E-RESOURCES

Selection is not a new term to librarian and staff as they have been doing it since long back the libraries started acquiring printed material. However Pharmaceutical libraries are now focusing to adopt e-resources information technology approaching towards the e-resources rather than

printed materials as technology developed and instant requirement of updating drug and formulation information. In fact, the emergence of Internet, particularly, the www (World Wide Web) has a triggered proliferation of web based full text online resources as a new media of information delivery. As the web has grown, Pharmaceutical information is not just in popularity and use, but also in content to research and development of pharmaceutical science field, librarians are trying to meet the needs of the user and identify new resources, such as online databases, web based resources, collections in digital library, e -books, e-journals etc. The selection process should be done in relevant with the demands of the users, committee, focus group, users recommendation etc. Apart from this, it should taken into consideration the following steps: [7, 8]

* Identify library needs
* Needs to identify content and scope of the e-resources.
* Evaluate quality of that particular resource and search capabilities
* Estimate the cost
* Needs to check either subscription based or web based when acquiring
* To evaluate the systems and technical support
* Check out licensing agreements
* Check the facilities for educational support and training.
* Check after sell services.

CHALLENGES FACED WITH E-RESOURCE MANAGEMENT

The adoption of e-resources has made great advantage over the library services. In fact, most of the users are satisfied with such facilities since they can easily retrieve their required information within a short period of time. However, libraries face a number of challenges as they seek to continue offering the high level of services that users have come to expect. Some of the issues facing by pharmaceutical library and information centre related to e-resource management are discuss below.

Traditional to modern library management – Personal relation built up from face to face-human contact in the traditional libraries gradually transfers to the man-machine interaction. Thus shifting towards electronic library is not as smooth as possible. To introduce electronic

library service, the management of traditional library differs from the management of electronic library in many ways, without changing fundamental concept of users satisfaction.

Revolution in the Library management system - The change of library system in today ICT era and development of ICT tools, library user's also expect information regardless of format, time and location of information. To provide better and faster service and to maintain a leadership role in the information technology, libraries have accepted the electronic resources. In doing so librarians are confronted with some critical criteria within the existing set up of the library.

ICT infrastructure - In a digital information service system, infrastructure such as software, hardware, internet facilities and other physical equipments are required to provide easier, faster and comprehensive access to information. Therefore, libraries in the digital age need to enhance and upgrade current technical architecture to accommodate e-resources.

Identification of users – In electronic enviournment identification of users is one of the major problems. The actual users of the network remain unknown.

User orientation – User's training especially use of e-resources guidance to use the computer and electronic devices needs the physical presence of the users. The lack of their physical presence in the scheduled time-slot makes the assistance more difficult to provide at any later period of time.

Rapid development of technology – Electronic library is fully dependent on rapid development of technology. The constant pressure of advancement in technology forces the libraries to upgrade the technology to reflect changes

Allocation and accommodation of electronic device - Each user frequently insists to allot electronic device to him/her to make the best use of time in electronic library. To accommodate all the users in a certain time in electronic library creates problems, because library is unable to provide each user one electronic device or computer.

Technical expertise -   Increased access to electronic information costs library timings and technical expertise. Thus library is compelled to extend electronic library timings with the existing strength of manpower and to involve the existing staff members in good number to cope up with situation.

Issues to preservation- Though the e-resources are enabling information to be created, manipulated, disseminated and located with increasing ease, preserving access to this

information posses a great challenge. Unless, preservation of digital information is actively taken, the information will become inaccessible due to changing technology platform and media instability.

Lack of professional skills- Due to lack of management and technical skills, the library professionals is not able to handle the e-resources. The professional staffs are required to constantly update their own knowledge and skill base so as to work in today's rapidly changing digital environment.

Lack of communication skills – The matter of communication skill is not only part of language but also concern to activities of library management because library not only have to deal with their users but also deal with publisher and venders at national, international level for to provide universal level e- resources.

Lack of enthusiasm and curiosity in library staff – Many time situation of this matter occurs due to no co-operation between senior and junior staff. Generally, the junior staff cannot share their knowledge and ideas when they feel there is no benefit of this in terms of salary increases.

Effect of administrative or managerial change – Pharmaceutical library and information centre address their mission to support research and teaching by building collections and developing services intended to meet the information needs of their users. If there is a sudden change in administrative level or management level in organization especially in self finance institutes, it may affect library activities.

Lack of cooperation of institutional staff members- The support and cooperation of staff members, programmers and technical staff are very essential to provide effective service in a digital environment. As such, the library staff should not only be technically competent but should also user-friendly-approach.

Budgetary limitations - This is the major challenging matter to manage good library and information centre. Most of the self finance institute libraries have inadequate fund for acquiring e-resources and so the users do not get their needy information at the right time. Libraries are at disadvantage when acting alone in this environment and there is need for cooperative purchasing through library consortia.

NEED OF CONSORTIA FOR E-RESOURCES MANAGMENT

 It is known that libraries and information centers are not able to procure, organize and disseminate vast amount of information due to lack of adequate fund and budget. Nowadays,

consortia subscription to e – resources through consortia of libraries is a viable solution to increase the access to e-resources at a lower cost. Library consortia refer to cooperation, co-ordination and collaboration among the libraries or institution for the purpose of resource sharing. The libraries all over the world are forming consortia of all types and at all levels with an objective to take advantage of global network to promote better, faster and most cost effective ways of providing e-resources to the information seekers. The collective strength of consortia members facilitates to get the benefit of wider access to electronic resources at affordable cost and at the bests terms and conditions. [9, 10, 11, 12]

CONCLUSION

The management of pharmaceutical library and information centre are now need to cope up with today's environment and manage the library with change management concept. With the rapid advancement in computer technology along with information technology, libraries and information centers have been blessed with electronic materials and therefore libraries are gradually shifting towards the electronic libraries with electronic resources. The ability to rapidly access large quantities of information has become easier with the introduction of web sites and CD-ROMs. New technologies and resources for locating and management of drug information are likely to become available in the near future.

As pharmacist and information professionals develop a comprehensive knowledge of available resources and the necessary skills to use these resources effectively, pharmacy will continue to more toward its goal as information based profession. Management of Pharmaceutical science libraries and information centers with e-resource will become the foremost agenda for the pharmacists, pharmaceutical researchers and the concerned library professionals in the future.

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