

Information Resource Management in Selected Public Hospitals of Mumbai

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Abstract:

The paper discusses the information resource management in libraries of public hospitals. There are almost 72 government/municipal hospitals in Mumbai. This paper surveys libraries of 6 selected public hospitals in Mumbai, for the management of its information resources.

The current rapid developments in the field of information and communication technology (ICT) have had a far reaching change in the nature of work in almost all libraries. These rapid changes have brought about new types of information resource centres, libraries and services. New concepts such as the hybrid library and the digital library have emerged. This paper also studies the services provided by the information resource centres with the use of ICT's in the selected public hospitals in Mumbai to satisfy the information needs of the health professionals and researchers of the hospitals at all levels.

Apart from the information resource centre the paper also attempts to investigate the use of latest information technology in hospitals information management systems on day to day basis to help the physician not only get a view of the patients records when they need it for clinical purposes, but also help them complete their medical records.

Introduction:

The advent of computers has led to automation and modernization of every aspect of human life. This has led to an extensive use of Information Technology (IT) and Information Communication Technology (ICT) which has immensely improved the quality of human life as well as made it possible even for the common man to access global information within a short span of time which would have otherwise been difficult.

Definition: Rowley explains IT as Information Technology involves the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by a micro-electronic based combination of computing and telecommunications [8]. Further, Information Communication Technology (ICT) is a technical way for processing and communicating information.

The progress of Information Technology (IT) and Information Communication Technology (ICT) has not only influenced every aspect of human life but has also made the arduous work of literature search or information search quite an easier task to information seekers and information managers[8]. A lot of time of the users, especially researchers, is saved if the literature search is carried out by modern gadgets and devices [9]. More productive and qualitative research becomes a reality because of the advent of modern techniques which is an advantage of information technology. IT and ICT has also helped libraries and information resource centres to be up-to-date with the required information and timely disseminate the information to their end users.

Libraries and Information Centres deal with data, information and knowledge and handling of these resources is the main function of the information management systems so designed. Information Management Systems, to manage the large volumes of information resources acquired, have always existed in libraries albeit in the manual form. Application of IT has however, made it possible for libraries to develop modernized information systems that aid in the various functions of a library that range from transactions, maintenance records to storing and providing access to information in an efficient and in speedy manner[8]. It has thus changed the manner in which libraries operate and provide enhanced quality services, adding value to it. There are more opportunities for users now to access information resources on

their own, without requiring the services of a librarian of a library or an information resource centre[6].

In this age of information technology and times of economic constraints, libraries of all types are under increasing pressure to evaluate their services; upgrade them and modernize them so as to make optimum use of its resources and satisfy its end users. Hospital libraries face a particular challenge because the goals of the health care system demand the relevance of library services to the health professionals so that patient care be determined [1]. Hospital libraries too have begun to automate library resources and services using information technology tools and methods.

Background:

In India, public hospitals libraries are governed and run either by city municipal corporations, Ministry of Health-State Government or the Central Government. They also enjoy the autonomous status under either of the government sector [7]. Their main objective is to provide timely up-to-date information to the clinicians, medical professionals and researchers, paramedical professionals in their fields of specialization which would directly affect patient care [7].

The major medical college and hospital libraries in Mumbai city are G S Medical College and KEM Hospital, LTMMC and Sion Hospital, T N Nair Medical College and Hospital, the Nair Dental College etc. run by the Mumbai Mahanagar Palika, (BMC) , the JJ Group of Hospitals and Grant Medical College, the GT Hospital, St. Georges Hospital, Cama Hospital, Govt. Dental College, Kasturba Gandhi Hospital, Rajawadi Hospital etc. run by the State Govt., Tata Memorial Hospital etc. under the Central Govt. whereas Bombay Hospital, Hinduja Hospital, Lilavati Hospital, Jaslok Hospital etc. are run by the trust or by non-public entities. The libraries of these hospitals have been maintained since inception and have made efforts to develop in sync with the needs of their clientele [7].

There are very few government and municipal hospitals in Mumbai city which have well established and developed libraries, and have also taken great efforts in initiating ICT applications for campus wide accessibility, though are partially automated and have e-resources too [7].

Many of the hospitals of the Municipal Corporation situated in the suburbs of Mumbai are yet to have automated systems for collection management or service provisions. Whereas many super specialty hospitals run and governed by private trusts, foundations or commercial agencies etc. like the Asian Heart Institute, or the regional cancer hospitals through-out India, governed by federal govt., have well developed libraries, which mainly focus on core areas of the Institute and thereby acting as special libraries within the domain of health care. Almost all these libraries are automated and have a well developed collection comprising of bibliographic databases, print journals, internet facility and several e-journals necessary to their organization activity. The Central Government bodies like the ICMR, National Medical Library, etc. have initiated consortium for institution libraries under their preview thus making maximum current information available within minimum time [7].

It was also understood that these hospitals too are assessed by various Medical Council Committees for approval to its newer departments and courses. And the libraries or information resources centres attached to these hospitals too have to face these committees and fulfill the requisite criteria and standards.

This paper attempts to give a brief summary of the 5 selected public hospital libraries in Mumbai and its information resource management systems that caters to the needs of the health professionals of the hospitals.

Methodology:

The study was carried out visiting these hospitals, questionnaire and personal interviews of the Librarians, indirect studies and available online information. It is important to note that

accessing data or information for this kind of research is often hard to find and as equally as difficult to know and obtain.

Information Resource Management in Selected Public Hospitals Libraries in Mumbai

1) **KEM Hospital and GS Medical College, Parel** run by the Municipal Corporation of Greater Mumbai have a common library and is called as Central Library which caters to the needs of almost 2800 Medical Professionals and Para-professionals which includes the students, professors, resident doctors, nurses etc. of the college, hospitals as well as visitors[10].

Since its inception i.e. from 1926 the library has been well maintained and developed to meet the needs of its users. It has a collection of 25129 books, 171 periodical, 170 e-journals, as well as access to near about 2400 periodicals through National Medical Library Consortia. The library also further provides access to wide range of medical information and knowledge by way of online databases such as MD Consult, PubMed, Proquest Medical Complete, Clinical Resource, Ovid, 3D Anatomy, BMJ Clinical Evidence. It provides several general, traditional and specialized services to its members and visitors.

The Library using SLIM software is partially automated and fully automation process is in progress. It has made best use of ICT to facilitate information search services on the campus through intranet. The hospital website has a link to the library website which further provides links to various online databases, e-journals and has also access to in-house collection through WebOPAC. It also provides internet facility to its users. The medical professionals are techno-savvy and they also get hands-on training on the information search techniques.

The hospital website gives detailed information about its history, departments, emergency medical services, OPD timings, visiting hours, hospital statistics etc. The hospital too has initiated the automation of patient's data using Hospital Information Management System (HIMS) software which will help the health professionals in their clinical decision making and providing better health care to the patient [10].

2) **Sir J. J. Group of Hospitals and Grant Medical College, Byculla** is run by the State Government. It is the largest referral public hospital in the Maharashtra State. The hospital and the medical college have a four storey central library called as The Central Medical Reference Library which was established in 1845. It has a unique collection of old Foreign Medical Periodicals' dating back to the previous two centuries and has a rare book collection of old books and monographs. The library not only caters to the needs of the medical professionals of its hospitals and medical college but also provides services to the Postgraduate medical professionals of peripheral hospitals viz. St George Hospital, GT Hospital, Cama Hospital, who are all part of the JJ group of Hospitals academia [11].

It has a collection of 60,000 (approx 44,000 on record accessioned books and 20,000 other books) and Journals Bound Back Volumes. Subscribes to 314 journals and has a vast collection of old foreign medical journals dating back to right from the original year and since the date of its inception eg. British Medical Journal, Lancet , Journal of the American Medical Association, etc. It provides several general and traditional services to its members and visitors [11].

The library's ongoing project in progress are E-library and digital library, Online Journal Access to all Departments through HMIS server, linking of Maharashtra University of Health Sciences (MUHS) online journals, and has also undertaken a major project of Regional

Medical Library Update and National Interlinking of all Medical College Libraries through National Medical Library, New Delhi [11].

The hospital has its own website developed which gives detailed information about its history, departments, college, courses offered, useful links where it provides links to important government bodies, education institutions, medical institutions, e-journals as well as online databases such as PubMed, Ovid, Cochrane Library etc.

The hospital aims to make best use of IT and has initiated the automation process by using the Health Management Information Systems (HMIS) software in the college and hospital. Through this, the departments, OPDs and wards will be linked together electronically. Patient history, reports etc will be available online. This will ensure that investigation reports are available early to the clinicians and appropriate treatment can be started well in time. It will also result in paperless administration [11].

The hospital also has plans towards Telemedicine where the hospital will be linked to peripheral hospitals by way of recent technology so help of the experts is available to doctors treating patients in smaller places. Video-conferencing equipment will be installed to conduct a real-time consultation between medical practitioners from the rural areas and specialists in J.J.Hospital [11].

3) Lokmanya Tilak Municipal General Hospital & Lokmanya Tilak Municipal Medical College, Sion run by the Municipal Corporation of Greater Mumbai was established in 1966. The hospital and the medical college have a common library which has developed its collection since its inception. The library has a collection of 22,938 books and subscribes to 185 journals. It provides general and traditional services to its members and visitors. The library is under the process of automating and networking of its information resources and services. It subscribes to e-journals and online databases. However, due to technical problems and renovation work under progress in the hospital the technology oriented information resources and service provision to the users were disabled.

The hospital has its website which provides its profile, annual statistics, importance of the hospital to the city of Mumbai, hospital staff, future plans etc. It has also initiated the process of automation and plans to provide computerized networking of all the critical care and surgical areas with the service departments [13].

4.) Tata Memorial Hospital and Cancer Research Institute, Parel run by the Central Government is distinctly different from all the above hospital as it is a super specialty hospital concerning only with the disease of Cancer, its diagnosis, treatment, prevention and conducts basic and clinical research (Oncology). The Library of the Tata Memorial Hospital has been maintained since the inception of the hospital i.e. since 1941. The erstwhile "Sir Ratan Tata Library" is now renamed as "Digital Library" since Nov. 2000. Though it is called Digital Library it procures born digital documents rather than converting archives to digital format as is usually the case in digital library. But, it has initiated digitization of TMH publications, thesis etc.[7].

The library has a restricted collection of books and monographs in the field of oncology, subscribes to 173 journals. It also further provides access to wide range of medical information and knowledge by way of e-books, e-journals and online databases such

PubMed, Medline, Cochrane Library, Science Direct etc. It is also a member of Dept. of Atomic Energy (DAE) Consortia and STM journals Consortia (on Science Direct) [7].

The Library has been fully automated and suitably customized library management software customized is used. This software keeps records of collection in all medias, keeps track of current arrivals, circulation activities and user profiles, Web OPAC system, and many other features necessary for the users and the library management as well [7].

The library has made best use of the ICT and through intranet it facilitates the campus wide access to its information resources. It provides several general, traditional and specialized services to its members and visitors. To highlight few of them it provides customized service of Table of Contents (ToC) of recent journals specially for nursing stations in wards where internet facility is not available, maintains in-house article database covering reviews, clinical trials, randomized trials, staff publications and other similar studies of importance to the hospital activity. It also provides internet facility to its users. The medical professionals are techno-savvy and tutorials on information skills, search techniques for various databases and publishers interfaces are designed and regularly conducted for end users [7].

The hospital has its hospital information management system (HIMS) and its website provides detailed information about its History, Patient Care, Cancer Prevention Clinical Research Advanced Centre for Treatment, Education and Research in Cancer, Hospital System Information, Right to Information Act, New Facility, News International Affiliations etc. It also provides links to its Digital Library which gives an excellent insight into its well managed collection and information resources available for the medical professionals. The members of this Digital library are provided with a user id and password to have an access to these information resources online from anywhere [12].

5) **Rajawadi Hospital, V.G. Gandhi and M.A.Vora Municipal General Hospital, Ghatkopar** established in 1958 is run by Municipal Corporation of Greater Mumbai. The hospital has a library. However, access to this hospital library was not possible due to administrative reasons.

6) **KB Bhatia Hospital, Kurla** established in 1989 run by the Municipal Corporation of Greater Mumbai is a small hospital as compared to those hospitals associated with the Medical Colleges of Municipal Corporation. It has a small library consisting of 400 books, subscribes to 50 periodicals and which caters to approx. 50 medical professionals of the hospital.

The use of computers and information technology in the library is yet to be implemented and is under process of consideration.

Limitations: Out of 72 government and municipal hospitals, this study covers only 6 selected public hospital libraries in Mumbai. Hence this paper has a very limited scope. However, further study could be conducted at state as well as national level.

Discussions:

Research Studies concludes that professionally led library services have an impact on health outcomes for patients and may lead to time savings for health-care professionals [4]. Two studies to quote here, first viz the Chicago Study which was carried out in the Hospitals in the Chicago in the year 1987 and the Rochester Study carried out in the Hospitals at Rochester, New York State in the year 1992 where the physicians rated the information provided by the library more appropriate than that provided by other information sources such as diagnostic imaging, lab tests and discussions with colleagues. The research also indicated that information provided by hospital libraries is perceived by physicians as having a significant

impact on clinical decisions making and on the subsequent patient care. The results also increased their store of scientific knowledge about the specific nature and extent of the impact of information provided by the hospital library [1,3].

Conclusion:

Although there seem to be many problems associated with the implementation of IT and ICT, it is clear that there is an opportunity for growth. Through proper flow of funds and allowing a certain degree of independence at the hospital level, there can be improvements in the total management system [5].

Every hospital has a library or information resource centre. The public hospitals which are associated with the medical colleges have large libraries not only in terms of its collection, spacious reading halls for users but has very good infrastructure for further growth and development, if planned properly. With this strength to its part and opportunities of IT, the public hospitals can reach to greater heights and contribute to quality of health care.

Thus if the governing bodies of these hospitals implements and puts a mandate on use of IT and ICT in every aspect of its management then definitely there will be a positive improvement in the system for better accuracy in reporting, improved patient care and quality assurance at the hospital levels.

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