

A Seminar on
Knowledge Resource Management 2008:
Evidence Based Approach: Information Resource, Service and Practice
Tata Memorial Hospital, Mumbai
11th and 12th November 2008

A Report

The success of the two day Seminar KRM2007 held in August 2007 prompted the Department of Library Science, Tata Memorial Hospital (TMH) to organise the KRM2008 jointly with the Health Libraries Association of India (HLAI). It received a fairly good response from the library and information science professionals in the country. The theme of the seminar namely, evidence based approach for the library service has a significant relevance in the medical library field because the medical professionals want authentic guidelines to support their decision regarding line of treatment and that too in a minimum possible time. Dr. Medha Joshi, Librarian, TMH, while welcoming the seminar delegates on the first day of the seminar on 11th November 2008, outlined the importance of the practice of evidence based librarianship and expressed a view that the deliberations at the seminar would be useful to all the participants.

Dr. K.M. Mohandas, Dean Academics, TMC & HOD DDCN, TMH, who presided over the inaugural function talked about knowledge explosion in the medical field due to which designing of new strategies to locate and obtain the relevant information economically and that too in the full-text form is essential. He informed that TMH has now affiliated some of its mainstream courses to the newly established Homi Bhabha National University and suggested that **specific course for the health library professionals** under this university could be planned. Dr. H.S. Siddamalliah, Principal Officer, LIS Centre, NIMHANS, Bangalore, in his preliminary remarks recalled the success of the KRM2007 for providing useful contents and guidelines and congratulated the TMH for organising the second seminar in the series. Interaction with the users at all levels is the key for improving the library service was his assessment. He also called upon the librarians to introspect and assess whether they are in tune with time or otherwise. He drew attention to the changing information landscape and emerging need for converting tacit knowledge into the authenticated explicit knowledge. Organization of such seminars and hands-on training workshops for the LIS professionals would go long way in preparing them to address this issue was his suggestion.

Dr. K. Satyanarayana, Sr. D. DG, Division of Publication and Information, ICMR, New Delhi, in his inaugural keynote address brought forth a need for transforming a LIS professional into knowledge manager. To that end he first elaborated the underlying process of converting data in information and information further into knowledge. He next dwelled upon the basics of knowledge management and highlighted the challenges such as building of strong leadership, developing appropriate techniques to handle the

data glut and strengthening human resource. He illustrated these issues with real life experiences. There is a need to help bridging the “know-do” gap in global health by fostering an environment that encourages the creation, sharing, and effective application of knowledge to improve health was his observation. He emphasised on knowledge management in the public health field, codifying the knowledge and dissemination of the best practices. He discussed the strengths and weaknesses characterising the LIS field to implement the new practices. The actions in the following order to meet the above objectives were suggested by him: i) developing digital library, ii) building institutional archives, iii) implementing public health management information system, and, iv) installing complete evidence based medicine information system. He indicated the availability of support from the ICMR to the HLAI and other institutions for undertaking projects and programmes in this direction.

The first technical session on the topic of *EBM - Information Needs: Users Perspective* was in the form of a panel discussion. The panel had a balance of senior and junior medical professionals from three departments of the TMH. It consisted of Dr. R.A. Badwe, Head, Dept of Surgery, and Dr. D. Nair from the Department of Surgery, Dr. U. Mahantshetty and Dr. P. Tike from the Department of Radiation Oncology, and, Dr. H. Menon and Dr. N.G. Patil from the Department of Medical Oncology. In the beginning Dr. G. Pantvaitya of TMH concisely presented the concept of evidence based medicine (EBM) and in what forms it is practiced. She cautioned that in real life EBM is generally found expensive, time consuming and involves in-depth exploration of the information, but needs to be implemented still. That set the tone for the panel discussion. Dr. Prabhash Kumar of TMH, who acted as a moderator for the panel discussion, asked a few specific questions like what sources do the panel members consult for their activities, what information support they would need when working at remote places, how a library can serve them in research and writing and how the clinical procedures could be recorded for the reuse. The response of the panel members and the intervention by Dr. K.M. Mohandas and other delegates made the session lively. It helped in understanding the information needs of the medical professionals under different situations and also the support necessary in terms of infrastructure and training.

The second session was devoted to the topic of *Trends in Knowledge Based Practices*. The session was chaired by Dr. Maya Avasia, former Librarian of the TIFR. Three presentations were made in this session. In the first presentation Dr. Medha Joshi, outlined the concept of evidence based library practice (EBLP). She informed that the EBLP originated in 1997 and enables health sciences librarians to integrate research findings into their daily practice by focusing upon a specific problem in need of immediate attention. Improving the service is at its core and for that purpose the LIS professional should critically analyse the feedback received from the users to make self-correction. Use of qualitative and quantitative research techniques for this purpose was recommended by her. She emphasized that the librarians will have to upgrade themselves as research scholars in the new era. She hoped that further research and practice will decide the utility of the EBLP in the health sciences.

Dr. Bharati Sen, Professor, SHPT School of Library Science, SNDT University, Mumbai, in the next presentation identified the five elements of the EBLP namely, 1) ask a question, 2) acquire the evidence, 3) appraise the evidence, 4) apply the evidence, and 5) Assess impact. Documenting this cyclic process can help establishing the EBLP on a sound foundation was her suggestion. Asking suitable questions and designing proper research studies to address them is therefore very important. Use of statistical methods is encouraged to provide the validity and finality to the recommended actions. She described in details the procedures that could be adopted for evaluating the information. Submission of the results to the management for decision making based upon such systematic studies would carry more weight was her assessment. The third presentation on the methods and deploying EBLP was made by Dr. H.S. Siddamalliah. He discussed the factors that are needed to upgrade the existing library practice to design and implement the EBLP. He urged the LIS professionals to change the mindset and view their service in a broader perspective that is, to answer a query in all respects and not the document delivery alone. He traced the barriers currently observed in the EBLP and stressed the need for research and collaborative attitude to overcome them.

The session ended with a product demonstration by the representative of EBSCO Ltd.

The third session of the day was chaired by Dr. Sushama Powdwal, Librarian, SNDT Women University, Mumbai. It was devoted to the topic of *EBL Applications*. Here too there were three presentations. In the first presentation Mrs. Shobha Kulkarni, Assistant Librarian, IIT, Mumbai, talked about increasing the use of electronic resources in the library. She identified collection of proper resources, correction for missing material or gaps, connection in the sense of providing the access to the users on one hand and joining consortia for enhancing the range of material and services on the other, and control of the material for reuse as the governing tools in this regard. Designing subject portals and extending virtual referencing service besides conducting hands-on training for the users do help the use of electronic resources was her submission. She gave a few examples from her the IIT library to support the claim.

In the second presentation Ms Aparna Nair from the TCS Library considered quantification of the usage of the library and web-based resources as a vital step. She recommended conduct of benchmarking studies for this purpose. She then outlined various components of a benchmarking study. Further she elaborated on the approach taken by the TCS library system that is spread across the country. Procurement and use of collection, variety of services and level of user satisfaction are some of the major factors taken into account in such studies. Suitable indicators and metrics to measure them have been constructed. Through user surveys and other means the data are collected and analysed accordingly. Such temporal and spatial studies bring out useful guidelines to improve the use of library resources and services, was her conclusion.

In the next presentation, Mr. Ananda T. Byrappa, Librarian, Whitney Knowledge Centre, GE Corporation, Bangalore, stressed the need for strict evaluation of the return on investment (ROI) as a criterion to continue or procure the electronic resources of journals and databases by the library. He suggested making the best use of the recently developed

standards like COUNTER – Counting Online Usage of NeTworked Electronic resources and SUSHI - Standardized Usage Statistics Harvesting Initiative for this purpose. The usefulness of these standards to the librarians for modifying procurement policies periodically and the vendors to develop new pricing models was further elaborated by him. He presented the details of the implementation of this ROI based model for e-journal renewal in his library. He also informed that a back up arrangement is kept in place in case any article from the dropped journal is required. He demonstrated how matching of commercial interest with user's need can still be achieved in practice by adopting such a professional approach.

The demonstration by SAGE Publications formed the last part of this session.

The day was rounded off by Dr. H.S. Siddamalliah informing the delegates about the formation of the HLAI. He described its aim, charter, proposed constitution, functioning modalities and activities. He appealed them to strengthen the HLAI by joining it and making it a force to reckon with.

The first session on the second day of the seminar namely, 12th November, dealt with *Knowledge Resources Management*. Dr. H.S. Siddamalliah chaired this session. Dr. Shubhada Nagarkar, Lecture, Department of Library and Information Science, University of Pune, Pune, made the first presentation. She talked about knowledge management in the academic environment. She first described the basics of knowledge management and followed it by elaborating the need for this activity in practice. She drew attention to the fact that considerable time is wasted in locating the relevant information in the knowledge management process. Document management and content management emerge as prerequisite for the knowledge management. That means evaluating knowledge assets and identifying the type of knowledge sources to be tapped and captured are essential in real life applications. According to her the librarians have multiple roles to play in the knowledge management like designing information systems, creating classification systems and taxonomies, and implementing and operating those systems. She further identified the skills for the librarian to undertake these tasks. She also put the stress on developing a database of experts and use of software tools for the content management. Next she demonstrated the information architecture in the academic setting of her department of library and information science to address different types of queries. In her view sound training needs to be imparted to the users in framing database search strategies for efficient retrieval.

Second speaker in the same session was Dr. S.N. Singh, Head, Information Centre & Library, National Institute of Virology, Pune. He first gave an overview of the on-line resources provided by his library. Next he described the search strategies offered to the users to access books and journals through web OPAC. He next demonstrated the use of resources available under the ERMED India consortium, Science Direct, OVID database, DELNET services and other electronic databases in his library. He informed about the success of resource sharing arrangement among the health sciences libraries in Pune. Mrs. Vasumati Sriganesh of QMed Knowledge Foundation, Mumbai, made the next presentation. She informed about the services her organisation is providing to the medical

professionals and students in searching and obtaining the information. This is offered in suitable packages. Her team conducts customised training programmes for the individual or groups for exploring the relevant electronic databases. Also the delivery of the document is arranged, if requested. In addition the development of web site in the medical field is undertaken by her foundation.

The session ended with the product demonstration by the representative of Wolters-Kluwers.

The second session of the morning was devoted to the *Case Studies*. It was chaired by Dr. S.N. Singh. Two case studies were presented. The first case study entitled, "Evidence Based Medical Librarianship: A Case Study of Trypanosoma Evansi" was presented by Mrs. S.S. Vyas, Librarian, Nagpur Medical College, Nagpur. She gave the background of the medical case which is very rare in India. Naturally, no documentary evidence or guidelines for treating such a patient was available in the Indian context. She, therefore, had to interact with the experts and clinical investigators to identify the possible search terms and then explore various sources and electronic databases to extract the relevant information. It was quite satisfying that the information thus supplied about the treatment and line of action followed in such cases at different places proved useful to treat the patient. The case study vividly brought out how the interaction of the librarian with other professionals is important in practice.

The second case was presented by Mr. S S Munnolli, Librarian, ACTREC, Navi Mumbai. He showed how the evidence about use of journals and databases has been systematically collected and analysed to help the authorities to take decision regarding their renewal under the given budgetary conditions. He described the factors and sources for finding the evidence regarding resources used like cost, impact factor, usage pattern and availability of the material in the vicinity. He showed how the data regarding use of both print and electronic resources was compiled and subjected to systematic analysis by his library team. Such evidence-based submission is found quite helpful in the resource subscription decisions. He further informed that submission of pictorial evidence of the soiled or damaged material received by the library has helped in getting the replacement from the publishers without much argument. The EBLP should thus become common was the message.

The third session was on *Integration of in-house Knowledge Management*. Mr. Ananda T. Byrappa chaired this session. Dr. H.S. Siddamalliah made the first presentation by giving an overview of integration of resources and systems. He brought out the need to establish a seamless integration of various resources. In other words one-stop retrieval system should be in place to simplify the search procedure. He further urged to develop the documentation of the electronic sources to the last details. He gave example from his library when access to certain databases was blocked due to IP address information not being properly handled along with upgrade of computer systems. He asked the librarians to be aware of such challenges while integrating various systems.

The second presentation was made by Mr. M.S. Mangrulkar, Head, IT Department, TMH, about experience of handling the system integration in the Tata Memorial Hospital. He listed the data systems to be integrated like information sources, biological data, patient information, employee data and vendor data. It is evident that such integration involves the fusion of domain knowledge and information technology expertise. Information integration here involves database management systems, web services, replication, federated systems into a common platform and a variety of programming interfaces data models. Addressing the diversity is the core issue in the integration. He then listed the aims and objectives of IT integrated developments at the TMH as follows:

- To provide improved services to patients
- To provide 'on-line', integrated & accurate information to users/ user groups
- To implement campus wide networking
- To capture data at source to avoid duplication
- To increase productivity & efficiency
- To provide user friendly graphical user interface
- To provide answers to ad-hoc queries

Naturally such development is to be implemented in phases. In this regard he traced the history of various initiatives taken by the TMH right from the computerisation of the hospital in 1985 followed by revamping the systems in 1997 and development of various information systems to support the medical diagnosis, treatment, administrative and research functions of the TMH. He then identified the benefits accruing to the management and patients by the integrated information systems and talked about the future plans. He concluded by demonstrating the capture of the patient's clinical history graphically and in the on-line mode for the use by the authorised medical professionals.

Dr. Anjana Chattopadhyay, Director, National Medical Library, New Delhi, next presented the services that are now being offered by her library. She told in details about the ERMED India Consortium for the electronic journals initiated by the NLM, which is helping its members all over the country to access technical journals at nominal price. She elaborated the benefits accrued to them with the support of use statistics and financial data. She also informed about other services provided by her library including training and document delivery. The last presentation of the session was made by Mr. Rajesh Pandit, a representative of Wolters-Kluwers. He presented the publisher's perspectives on integration and addressed the challenges. In order to reap the maximum benefit of knowledge integration he suggested developing flexible solution. He demonstrated the universal search strategy developed by his company to facilitate the searching that can help economise on efforts.

The Valedictory function was presided over by Dr. Sujin, Dean, Faculty of Informatics, Mahasarakham University, Thailand. Dr. Sujin was introduced by Dr H S Siddamalliah. For the benefit of the President, an overview of the deliberations that had taken place in the seminar over the two days was presented by Dr. Vivek Patkar, Independent Researcher, Mumbai. Dr. Anjana Chattopadhyay, who was the Chief Guest for the

function, then addressed the delegates and called upon them to improve the library practice to support the health professionals and researchers in the country at all levels. Dr. Sujin in his presidential address congratulated the TMH and HLAI for organising the seminar on such an important theme. He expressed the hope that deliberations over the two days must have benefited the delegates and they would be able to implement some of the practices so discussed. The function concluded with the vote of thanks proposed by Dr. Medha Joshi.

Actions are recommended on the following suggestions that emerged from the discussions and deliberations at the KRM2008:

1. Guidelines for the libraries are to be developed to address the information needs expressed by the panel members at the KRM2008.
2. Periodic organisation of users' training for efficient utilisation of the electronic resources is necessary.
3. More case studies on the evidence based librarianship should be undertaken and disseminated.
4. Certified mid-career improvement courses for the medical librarians in the country are to be designed and launched at the earliest.
5. Development of institutional repository is to be taken up on the priority basis.
6. The medical research and other study findings could be brought out in the form of working papers by the respective institution for quick dissemination.
7. Specific proposals for the conduct of training programmes and workshops be prepared and submitted to the ICMR, New Delhi for possible funding.
8. The next KRM Seminar should take into account the feedback received from the KRM2008 and modify its structure accordingly, especially to increase the participation by the delegates in the proceedings.
9. A periodic follow up with the delegates and providing necessary additional inputs to them by the TMH and HLAI to implement the evidence based library practices would be useful.
10. Networking of medical libraries at the local and national level to share the resources and practices needs to be strengthened.
