Dynamic Reference Desk at Medical Division Library of Bhabha Atomic Research Centre

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Abstract: Present paper describes multidimensional necessities about the dynamic reference desk to cater quality information needed for academic as well as practice and research needs of consultant doctors, resident medical officers (RMO) and housemen, nursing staff, paramedical staff, panel doctors approved for alternative medicine, Tata Institute of Social Sciences (TISS) students for internship in hospital administration, patients, relatives of Department of Atomic Energy (DAE) employees, etc.

Keywords: Academic Medicine, Bibliotherapy, CHSS, Clinical Librarianship, Contributary Health Services Scheme, DAE, Department of Atomic Energy, DNB, Diplomat National Board, Empathy, Epidemics, Evidence-based medicine, Hospital Library, Informetrics, Infotherapy, Lasers, Library Website, Medical Library, Patients Library, Telemedicine

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“Knowledge must be accessible to all, in a form which is useful and can be acted upon by different people and groups.”

World Health Organization [1]

**Introduction:**

Bhabha Atomic Research Centre (BARC) Hospital, Trombay, Mumbai takes care of the health of the Department of Atomic Energy (DAE) employees and their dependents [2-4].

At present the BARC Hospital and its allied dispensaries (13 Dispensaries) cater to more than 75,000 Mumbai-based CHSS beneficiaries and more than 10,000 referrals from outstation DAE units. For tertiary care the organisation has meticulously identified and included on Panel: doctors and Medical Institutes that are the best in the country.

Mandate of Medical Division are to:

- provide comprehensive health care equally to all beneficiaries,
- keep pace with the New Bio/Health Technological advancements in the fields of medicine and health care,
- enhance and upgrade the health care facilities, and
- contribute actively in development of various fields of medicine by carrying out meaningful research.
General Responsibilities of Medical Libraries:

Medical and Nursing profession is advancing day-by-day at par with other professions. The quality of health care services and patient care depends upon the preparation, knowledge, attitude and professional competencies of doctors and nurses. They should keep abreast with changing needs of society and equipped with up-to-date knowledge. Integration of In-service education and quality library can meet the required medical information needs. An organized and up-to-date library can play a vital role in hospital field [5].

Aims of establishing medical/hospital library are to:

- identify information needs of doctors, nurses and paramedical professionals,
- develop well balanced and up-to-date collection,
- organize collection as per the users needs that will enable the readers to use the library to the maximum,
- communicate with the readers about the new arrival of educational literature in library,
- facilitate hospital research work, continuing medical education programmes, inhouse hospital publication work, and
- act as a vital link between information sources and users.

A wide range of professional skills are expected from the health care professionals. Hence the knowledge base of medical professionals has to cover a wide span across many fields of medicine. Hence constant reading, training and awareness are a must. Efforts have to be made to ensure that IT facilities to access electronic information sources and Books, Journals are always available and regularly used. Hence, role of Medical Library in the Medical Information Process is to organise, preserve and disseminate medical information.
Medical Division Library/BARC Hospital Library:

A Hospital, especially a teaching hospital cannot do without a library. A separate library other than the main BARC Central Library is present on the ground floor of the old hospital building. This enables easy accessibility and can therefore be used more optimally. It is an integrated library that is used by doctors, nurses and other paramedical staff.

BARC Hospital is recognised by Diplomat National Board (DNB), New Delhi and Medical Council of India (MCI) for following five departments -Anesthesia, Pediatrics, Surgery, Obstetrics & Gynecology and Medicine. This enables the candidates to undergo the requisite training in BARC Hospital and do their post graduation as Academic Medicine through DNB. Medical Division Library plays role of academic library by catering to the educational information needs of DNB registered students.

Teaching postgraduate students is a very effective way to keep abreast of advances in the Medical field. The benefits accrue to the DNB registered RMOs and Consultant doctors alike. Medical Division, BARC holds Continuing Medical Education programmes to update medical officers, post-graduate students and nursing staff. Medical Division Library actively supports these programmes by providing latest books, current medical journals, electronic information resources and other educational literature which has scope in medical and nursing education.

Target Users of Medical Division Library:

Consultant Doctors:
They use latest books, reference sources and current issues of medical journals related to their area of specialisation. Consultant doctors frequently use medical library for quick reference whenever they urgently require information about diagnosis and treatment of any disease. They use printed information sources available in library as well as electronic information sources available at the Internet Centre adjacent to Medical Division Library to keep current with the most up-to-the minute information in medical field.

Resident Medical Officers (RMO) and Housemen:
Medical Division Library caters to the academic information needs of DNB registered students pursuing postgraduate studies. Library plays an important role by providing strong base of knowledge documented in library resources that supplements the practical knowledge gained through clinical experience by junior doctors.
Nursing Staff:
Nursing staff regularly use library for reference and also for academic purpose. They participate in educational programmes, lectures and training programmes for their professional advancement.

Paramedical Staff:
X-Ray department technicians, Pathology Laboratory technicians, Dental technicians and Operation theatre assistants make regular use of library to develop their professional skills.

Panel Doctors approved for Alternative Medicine:
In addition to Allopathic Medicine practiced at BARC Hospital, those who are prescribed to undertake alternative medicine for their treatment are provided with facility of Panel doctors: Homeopathy, Ayurvedic, Siddha Medicine, Naturopathy, etc. Whenever Panel doctors and/or patients interested in the alternative medicine treatment approach Medical Division Library necessary information required by them are fulfilled.

Tata Institute of Social Sciences (TISS) students for internship in Hospital Administration:
Whenever they are deputed for internship required facilities are provided as per instructions from Head, Medical Division.

Relatives of BARC employees:
As per request of the employee and permission granted by Head, Medical Division facilities are extended for academic purpose.

Patients:
Patients admitted in the hospital and out patients are provided with some of the journals, brochures, booklets, pamphlets, etc. Enquiries answerable at Reference Desk itself are done with. However, if patients are not satisfied with the information, they are directed to respective experts and/or Social Service Section at BARC Hospital.

Library Collection:
Suggestion slips for books & journals received from users are forwarded to Acquisition Unit, Central Library of Scientific Information Resource Division, BARC for procurement of new books and periodicals. It is a regular practice adopted to develop need based and up-to-date collection to cater to the information needs of consultant doctors and DNB registered students. Ordering, acquisition and technical processing of new books and journals is done at BARC Central Library.

Current Status:
Books: 2182
Journals: 60
Bound Volumes of Journals: 525
Electronic Journals: 29

Books:
Books are arranged on the shelves in the order of their Universal Decimal Classification (UDC). Broad subject wise arrangement is adopted to suit the user needs. Labels are pasted on racks to facilitate location of the books. The principal source for locating the books is the card catalogue.

Reference Collection:
A number of important books like Year Books, standard textbooks and costly documents have been set aside for reference purpose only. These documents are always available for reference purposes. Library receives thirteen yearbooks on different medical subjects.

Periodicals:
At present Medical Division Library acquires about 58 medical journals. Current issues are displayed alphabetically according to the titles. The recent back issues of the periodicals are kept in their respective pigeon holes.

Bound Volumes of Back Issues of Periodicals:
When all the issues comprising one complete volume of a journal are received in the Library, they are bound along with the index to the volume and shifted to the area where bound volumes of back issues are shelved. The arrangement of the bound volumes is also alphabetical, according to the title of the journal, and is chronological within the set.

Other Materials:
Medical Division Library receives gratis copies of books, journals, conference proceedings, hospital magazines from other medical institutions. These are displayed on specially designed display shelf.

Few Examples are:
- The Essentials of Contraceptive Technology: A handbook for Clinic Staff
  Published by Johns Hopkins Population Information Program, The Johns Hopkins School of Public Health, USA.
- Cancer Morbidity and Mortality in Greater Mumbai
  Published by Indian Cancer Society, Mumbai. (A Project supported in part by the Indian Council of Medical Research, New Delhi.)
- Bulletin of the World Health Organization
  The International Journal of Public Health Pub. by World Health Organization (WHO)
- International Family Planning perspectives
  A peer-reviewed journal published by The Alan Guttmacher Institute, New York
Electronic information sources:

**Electronic Journals:**
Users can access 29 leading medical e-journals by using the Internet facility of BARC Hospital. Necessary Use#ID and Password details are provided to users. A complete list of Medical Titles on Internet is always maintained at Reference Desk.

**Science Direct Database:**
Publications under Science Direct, Academic Press, Cell Press & Bio Med Net in Electronic form are accessible through Elsevier’s Science Direct. Separate User ID & Password is provided to Medical Division Library users.

**MEDLINE:**
It is the National Library of Medicine’s (U.S. Department of Health and Human Services, and Research Information System, Inc.) Bibliographic database for Biomedical literature. Users can directly access MEDLINE through Science Direct. Necessary access details are provided to users.
MEDLINE (On CD-ROM) from year 1966 to 2002 is available in BARC Central Library. Users of Medical Division Library can access it using IT facilities provided by BARC Central Library.

Services:

**Circulation of books and journals:** Circulation Service is provided to Consultant Doctors, RMOs, Housemen, Nursing staff and other paramedical staff working in Medical Division, B.A.R.C.

**Reprography Service:** On request basis Xerox copies of Journal articles are provided.

**Reference and Information Service:**
To direct users towards other information sources available in Central Library or other medical libraries. This service is offered to users in coordination with BARC Central Library.
Queries of distant users are answered on phone or through email and necessary information is passed on to them.
To provide access details of Electronic Medical Journals and Science Direct Database Changes in access details and necessary instructions are regularly communicated to users.

**Interlibrary loan:**
Whenever any publication –a book, a journal or a report is neither available in Medical Division Library it can be borrowed from BARC Central Library. Availability of the required document is checked in other medical libraries and necessary details are provided to users. This service is provided in coordination to
BARC Central Library as it has regular resource sharing programme with other libraries.

**Document Delivery Services:**
Photocopies of articles /papers from journals, current as well as back issues, available in the library are provided to readers. Requests of readers for photocopies of articles from current journals available in BARC Central Library are also fulfilled.

**Periodicals Holdings:**
Medical Division Library holdings include 58 current journals (Appendix-1) and the Internet access to 29 e-journals (Appendix-2).

**Current Awareness Related to Medical Librarianship:**
This is a special type of librarianship which is embracing: clinical librarianship/patient care librarianship, bibliotherapy, infotherapy, telemedicine, etc. which provides challenging opportunities for the professional career of information dissemination to specific targets.

**Information Service related to Epidemics:**
AIDS is going to be of topical importance in few years, as all over the world signs of AIDS epidemic are detected. Hence, all sorts of people will be interested to know details, because “Prevention is the only cure in AIDS disease”. Librarian will have flood of information on AIDS, but what is most important is packaging this information as per the needs of the clientele. Librarian has to anticipate or visualise the need for information and keep to ready whenever information needs about epidemics such as SAARS (Severe Acute Respiratory Syndrome), Cholera, etc. arises. List of journal articles or latest books dealing with such diseases is provided to users.

**Current advancements related to Medical Information Dissemination:**

**Clinical Librarianship:**
Clinical librarianship (CL), currently receiving renewed interest worldwide, seeks to provide quality-filtered information to health professionals at the point of need to support clinical decision-making [6].

**Interactive approach in Clinical librarianship:**
Medical/Clinical librarians should try to develop substantially professional training in some relational roles in the library services, mainly for distant users. The interactive approach promises to reveal and show hidden medical/clinical library profession and our capability to support users research, from the search and publication of medical evidence to use the scientific knowledge for patient’s health [7].
Digital Library Interface:
ICMR-NIC Centre for Biomedical Information has developed various products that are available over the Internet. These includes:

**UNcat**
(http://uncat.nic.in) - union catalogue of journal holdings of medical libraries of India;

**IndMED**
(http://indmed.nic.in) - A bibliographic database of Indian biomedical journals

**medIND**
(http://medind.nic.in) - full texts of Indian biomedical journals being indexed in IndMED.

The focus of future activities would be to integrate these services, tools and content in operation both internally and externally to provide single window digital access persistently. They are accessible by their own interfaces as well as through Digital Library interface [8].

**PubMed:**
Pub/Med offers different levels of information retrieval:

- **basic/general:** easy to use for any search
- **advanced:** Boolean operators and selected search areas can be used for a more specific search
- **specialized:** search on an even more specialized basis, conceived for physicians and experts.

Physicians try to keep up to date on the developments and discoveries in medicine and biology in order to deal with their better-informed patients. It is important that information professionals should make every effort to benefit from new services on the net, but without abandoning tried and tested techniques they know well and rely on [9].

**Computers in Dentistry:**
Computer-based clinical workstations and software systems for patient records offer emerging technologies important to the practice of dentistry. The era of digital imaging in dentistry has certainly commenced and current intraoral digital systems have been shown to provide definite diagnostic advantages. Increasing numbers of dental practices are computerised [10].

**National Science and Technology Policy:**
Success of librarianship lies in getting symbiotically integrated actively as current, comprehensive information component into the strategies to solve macro-objectives [11] of contemporary national problems:
- improving human health
- AIDS prevention and counseling, etc.
Informetrics and MEDLINE/MEDLARS:
By using MEDLINE database it is possible to draw various data and information to project the characteristics and trends of information generation in a particular domain. Informatics has its utility in the decision making process. It can identify strengths and weakness in a research domain [12]. Librarians can perform information analysis using MEDLINE or MEDLARS databases. For example a few studies have been carried out, which may benefit health care professionals.

(a) Accidents and Trauma: Analysis including countrywise origin of research papers, authorship pattern, countrywise source journals, languagewise research papers, journalwise scattering of research papers, expertise based on those who have high authorships to their credit, and high frequency Medical Subject Headings (MeSH), etc. may facilitate researchers to comprehend quantity and quality of R&D [13-14]

(b) Lasers in Medical Applications:
The study of the MEDLINE CDROM database, for the period 1969-2000 was undertaken. The purpose was, to identify core areas of research and development, in the field of applications of lasers to humans, along with other bibliometric indicators of research [15].

Bibliotherapy/Infotherapy:
Bibliotherapy is accepted as adjunctive therapy. With developments in Science and Technology bibliography encompass anything and everything dealing with interactive communications at local as well as global levels. Bibliotherapy is used in medical practice to a limited extent in the treatment of mentally challenged patients. The librarians working in hospital libraries have joined their hands with doctors in the practice of bibliotherapy Nowadays it is admitted without difficulty that any therapy related to the spiritual component of the man, or music, theater, reading, etc. helps of considerable way to recover the balance that is lost when becoming ill. It is in this scope and within the process cure-to take care of where it receives meaning the implementation and development of the Libraries for Patients [16].

Infotherapy is an interdisciplinary, multidisciplinary, as well as extra disciplinary domain which needs considerable attention by library and information professionals [17].

For example application of bibliotherapy/Infotherapy to the domain of Dentistry:

- Healthy dental care habits
- Preventive medical care of dental health
- Role of Dentist
- Role of Clinical Librarian
- Role of Healthy individuals and patients
- Role of relatives of the patient
- Role of Pharmaceuticals
- Multimedia available: (a) Pamphlets, (b) Books, (c) Booklets, (d) Audio tapes, (e) Audiovisuals, (f) Computer aided information, (g) X-ray visuals, (h) Communication skills
Round the Clock Librarianship:
Already consciousness has developed for Round the Clock Librarianship (ROCLOLIB). It will be a boon to the scholar librarians who prescribe, reading material to solve subject related, individual/social problems, etc. [18].

Empathy in librarianship:
Librarians are still not clear as to why people don’t accord due status and recognise their services. And people are still not clear about the potentials of information and to what the librarian is upto and as to why he needs more and more of their attention, money, recognition and status. Answer lies not in accusing each other. Empathy is the only answer. This attitude may result in synergy and symbiotic development and commensalisms [19].

Website Designing:
A user survey which investigated the attitudes and opinions of library users (academic staff, medical staff and students), with a view to highlighting problems and improving services has already been reported [20]. Similar studies can be carried out by taking into consideration: user surveys, academic libraries, medical libraries, health libraries, library design and architecture, problem-based learning, etc.

Telemedicine:
The use of telecommunications technology to provide, enhance, or expedite health care services, as by accessing off-site databases, linking clinics or physicians' offices to central hospitals, or transmitting x-rays or other diagnostic images for examination at another site are already being practised [21].

Conclusions:
All over the world consciousness about health care has grown. Information technology has destroyed the barriers of time and distance by shrinking the globe into globule. Current trend is towards holistic approach to health care. Library and Information professionals must actively participate as partners in this endeavour.

References:


http://eprints.rclis.org/archive/00001038/

http://eprints.rclis.org/00001121/


http://eprints.rclis.org/archive/00001375/


http://eprints.rclis.org/secure/00002253/01/project.doc

[21.] http://www.lib.uiowa.edu/hw/telemed/
Appendix-1

Subjectwise list of journals available in Medical Division Library

ANESTHESIA
1. Anaesthesia
2. Anaesthesia and Analgesia
3. Anesthesiology Clinics of North America

DENTAL
4. British Dental Journal
5. Dental Technician
6. General Dentistry
7. Journal of the American Dental Association

ENT
8. American Journal of Otolaryngology
9. Otolaryngologic Clinics of North America

MEDICAL
10. American Journal of Cardiology
11. American Journal of Medicine
12. British Medical Journal
13. Indian Journal of Medical Research
14. Indian Journal of Medical Sciences
15. Issues in Medical Ethics
16. JAMA: Journal of American Medical Association
17. Journal of Internal Medicine of India
18. Medical Clinics of North America
20. Postgraduate Medical Journal
21. Progress in Cardiovascular Diseases

OBSTETRICS & GYNECOLOGY
22. American Journal of Obstetrics & Gynecology
23. BJOG: British Journal of Obstetrics & Gynecology
24. Clinical Obstetrics & Gynecology
25. Obstetrics & Gynecology (with supplements)
26. Obstetrics & Gynecology Clinics of North America

**OPHTHALMOLOGY**
27. British Journal of Ophthalmology

**ORTHOPEDICS**
29. Journal of Bone and Joint Surgery
30. Orthopedic Clinics of North America

**PATHOLOGY**
31. American Journal of Pathology
32. Journal of Clinical Pathology
33. Molecular Pathology

**PEDIATRICS**
34. Archives of Pediatrics and Adolescent Medicine
35. Clinics in Perinatology
36. Indian Journal of Pediatrics
37. Pediatrics Today
38. Pediatrics Clinics of North America
39. Pediatrics

**PHYSIOTHERAPY**
40. Physical Medicine and Rehabilitation Clinics of North America
41. Physical Therapy

**PSYCHIATRY**
42. Archives of General Psychiatry

**RADIOLOGY**
43. American Journal of Roentgenology
44. Radiology
45. Journal of Clinical Ultrasound
46. Radiologic Clinics of North America

**SURGICAL**
47. British Journal of Surgery
48. Journal of American College of Surgeons
49. *Surgical Clinics of North America*
50. *World Journal of Surgery*
51. *Journal of Urology*

**Other general medical titles**
52. *Lancet*
53. *Nursing Journal of India*
54. *Practitioner*
55. *Update*
56. *International Journal of Clinical Oncology*
57. *Indian Journal of Clinical Practice*
58. *Indian Journal of Social Work*
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<td>7. British Medical Journal</td>
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<td>8. Clinics in Perinatology</td>
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<td>15. Medical Clinics of North America</td>
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<td>16. Molecular Pathology</td>
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