ICMR RESEARCH INSTITUTION LIBRARIES: A NETWORK PROPOSAL

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Abstract

ICMR has a network of permanent and regional research institutes to promote research suitable to the health needs of the country. However, it is yet to develop a network of libraries / information centres functioning in the institutions to ensure access to national and international health research information. The paper suggests a model for networking ICMR libraries,

INTRODUCTION

The Tndian Council of Medical Research (ICMR) is an autonomous body responsible for the orgini7.ation and management of research in the field of medicine. The council was set up in 1950 with headquarters located in New Delhi. Over the years, it has evolved research strategies for extramural and intramural research in identified thrust areas. As one of the leading organization in the field of Medicine it has a network of permanent and regional research institutes to promote research suitable to the health needs of Ihe country. It is no exaggeration to state that libraries are one of the primary sources of knowledge that contribute to the advancement of medical research through dissemination of national and international health research information. So, almost all the institutes have very specialised libraries to cater to the needs of their scientists.

21CMR INSTITUTE LIBRARIES

An attempt has been made to examine how far the institute libraries of ICMR have been fulfil lini> their objectives. A survey was conducted with a select

ed sample often ICMR institute libraries viz.,

National Institute of Nutrition, Hyderabad.
(This includes Food & Drug Toxicology Research Centre & Laboratory Animals Infonnation Service Centre)

Tuberculosis Research Centre, Chennai

Institute of Iinmunohaematology, Mumbai

Vector Control Research Centre, Pondicherry

I nstitute for Research in Medical Statistics, Chennai

Entcrovims Research Centre, Mumbai

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The survey method was adopted with questionnaire as a tool. Two questionnaires, one for libraries (numbered 10) and the other for users, with a sample size of 50%, were distributed to collect data. The following are the significant findings drawn from the analysis of the study with a response rate of 79.71%

2.1 Results of the survey of ICMR libraries

* none of the libraries have independent building and suffered with inadequate accommodation. However, almost all libraries have been provided with communication facilities such as telephone, telex etc.,

* Andhra Pradesh-530 003. the manpower in these libraries, compared lo the existing recommendations made by the professional bodies, is highly deplorable.

* there is no uniformity of budgetary sanctions. Indeed the sanctions are arbitrary without following any criteria such as number of users, or projects on

hand etc.,

* the acquisition of books and other monographic material is by no means comprehensive. The peri odical collections are particularly sparse and the microform and audio-visual collection arc also scanty. Hence the libraries are not up to the standard in their collection building. The financial crunch has lead these libraries towards slump in documentary collection development.

* organisation of information sources also varies from library to library though they are working under the same parent organisation ic., ICMR.

* the picture regarding the information services offered is also not encouraging. Lending and consul tancy of documents and references are the only services being provided by the institute libraries surveyed. CAS is being offered in seven of the libraries while the preparation of subject bibliogra phies are maintained by only four libraries. Further, these libraries are not able to utilise a magnitude of services available at national and international level to cater the information requirements of researchers / scientists.

* another obvious finding is the absence of co-operation among these libraries. *A* strange feature is that even inter-library loan facility is not in practice. It is expected that there could be minimum of linking among the sister institutions, just like in CSIR laboratories (India), which are networked through SIRNET to Communicate research information.

* a startling revelation is that these libraries arc not functioning as per the recommendations made by MCI, ICMR and NML (1982) and their services are substandard compared to recommendations made fifteen years ago. A well organised and administered library with excellent services to its clients is to be mandatory for the effective operations of every modern scientific research institution. Consistent awareness of the efforts of other research workers must

be sustained in order to profit from the incentive.

But, as i he above findings apparently indicates with the inadequacies the ICMR libraries are serving thdr users demands. Albeit, the ICMR is dedicated to the solution of India's critical health problem, it is not assisting its scientists with adequate health literature/To serve their scientists, every library should became a dynamic entity operated with adequate resources, financial, manpower and material, It is difficult for an array of isolated libraries with limited resources to achieve this goal. The ICMR institute libraries offer a challenging opportunity for the development of a network system of communication since they are Auctioning under the administrative control of a single apex body i.e. ICMR (New Delhi).

3 NETWORK SYSTEM OF ICMR RESEARCH INSTITUTIONS:A PROPOSAL

The concept of networking implies a higher degree of functional interdcpcndency, resources pooling, responsibility of sharing, commonality of systems, standards and goals. A network developed with the aid of information technology ensures availability of and accessibility to, vast variety of infornation that is needed for scientific decision making, research and development in all walks of life. This vill consequently ensure optimum exploitation of information sources lying dispersed in different ins itutions at different places.

The proposed network system of ICMR research institutes envisages a wider accessibilit; • of its resources, facilities and services to researchers/scientists disbursed all over the country by intt r-connect-ing various research centres. The researchers/scientists, irrespective of the distance and location, can access information available from anywhere in the network.

Uses: Two advantages of a network over a single system or group of unconnected single syste ms are that it (1) increases the flexibility of a system and (2) improves the way of performing certain tasks such as:

* resource-sharing - resources include storage facilities, processing capabilities, and dc dicated communications servers among ICMR institute libraries.

* remote file access - having access to files on remote network nodes facilitates, users to access the most current information / data.

* distributed databases - users throughout the network can make use of health science i iformation stored in common databases on remote nodes.

* file transfer — network exchanges files rapidly, speeding up the flow of health research infonna tion between organizations and decreasing the amount of paperwork that must be hai idled.

* communication with foreign health science information system or vendor systems.

Thus, the network system is expected to perform multiple functions of library and information service, management of network operations and maintenance, at national, regional and local levels. Many of them require interface with the communication system. The proposed hierarchical network structure has three levels of links.

3.1 National Focal Point (NFP)

In the proposed network, ICMR-NIC, Delhi can act as National Focal Point. There can be four centres namely NIN. Hyderabad in south, IRR, Bombay in west, NICED, Calcutta in East and Institute of Pathology, New Delhi in North which act as Regional Central Libraries (RCL). All the local centres in different regions can be linked with the Regional Central Library and all the four Regional Central Librarie s can be linked with ICMR-NIC. The ICMR-NIC is centrally located and also possesses adequate funds, sound collection of current documents and computer facilities. Hence its objectives may include:

* to develop a network of ICMR institute libraries with adequate infrastructure facilities, including computer, and communications;

* to undertake the overall coordination of operations and management of the network;

* to provide funds to the institutional libraries, based on the nature of work and the expected outcome;

* to train manpower suitable to the present and further development of the system;

* to control and supervise overall implementation of the network programme.

3.2 Regional Central Library (RCL)

The RCL should have a central computerized system to implement its functions at the rcqm^ed speed and accuracy. The operational functions of the system encompass:

* computerizing the information system and maintain centralized databases relevant 10 health infor

* **mation as a whole;**

* coordinating activities through bringing out a union catalogue with the holdings of all the participating libraries, ii. introducing cooperative acquisition programme, especially for foreign periodicals.

* acting as a reservoir library and supplement the **information** resources of other participating librar ies;

* developing information transfer and formal conversion mechanisms between RCL and the local centres;

* establishing links with ICMR-N1C (New Delhi), to obtain MEDLINE literature searches and other **information services.**

* making policy decisions on selection, procurement and marketing of services clc,

3.3 Local Centres (LC)

These centres would be directly under the **administration** and financial control of Indian Council of Medical Rescarcli (ICMR. New Delhi) The actr\ itics of these centres would be:

∗   lo maintain basic collection of documents to meet the local information needs

∗   to develop supplemental, specialised local library collections;

∗   to cooperate with RCL and other participating centres in developing a union catalogue

∗   to serve the user with basic services such as document supply service, reference, CAS, SDI etc.,

∗   to process the request and to obtain information from a designated point, either local or external, tbrough online or offline.

∗   to maintain reprography facilities to supply the reprints;

»   to utilize the services offered at national level by NML, NIC etc., and to have access to a variety of external resources such as MEDLINE, BIOSIS, EX-MED etc., through RCL;

*   to take measures to provide access to the actual information rather than bibliographic citations.

3.4 Areas of sharing

The activities under the programme may include sharing of

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Information resources human resources, and material resources such as computers and other technologies.

Activities such as inter library lending, cooperative acquisition, cooperative

cataloguing, the joint use and development of computer systems and manpower development programmes.

Services such as retrospective searches, CAS, SDI, repackaging and translation sei vice etc.,

3.5 Development of Data Communication System for 1 CM U libraries

The data communication process requires the following phases: the physical transmission medium rules for accessing and using the physical medium provision for routing between network provision for reliable message delivery. (Virtual circuit & Data gram etc.,) managing use of message delivery service by one or more processes provision for network services such as file transfer and electronic mail.

Hence setting infrastructure requirements is the first phase in the sequence of developmen phases. The integrated automated network with distributed base of operation for data processing requires the automation of all the participating centres and linking them with P and T lines. This would include adequate provision of computer systems with appropriate hardware and software protocols, compliance with the international standards, trained manpower and financial support.

Each centre can have access to host-based resources and distributed computing sites if it can develop the basic hardware, software, and humanware.

Hardware
Pentium III that can access the videotex! services
Modem with a baud rate of 56 mbps
Laser printers •
STDline
Internet connectivity
Net password

Software

The software may be built-in to the computer already, for the purpose of online searching or it may have to be purchased separately and loading each time the computer is to be used for online searching. The types of software available vary but it requires maintaining the basic and enhanced functions'. The basic function includes the ability to access any online host; to configure the microcomputer for telecommunication; to interpret flow of data from computer; to store data such as phone numbers, log on information, search statements etc., to receive data from computer. The e nhanced function relates to logon procedures search preparation, receiving data etc.

Human ware

A well-qualiiied information professional is the backbone for net work activities among ICMR libraries. A professional who has adequate knowledge and experience in handling information technologies for network linking certainly provide effective performance.

The usual institutional constraint on a library considering a new network system is fiscal. Once the librarian has demonstrated the effectiveness of new technologies the institution is to give support. Hence, the network programme is based on the ICMR attitudes and policies, fiscal health and the role played by the information officer/ librarian.

4 CONCLUSION

The health science research libraries in Indig have to go a long way to achieve efficiency in their performance. The need is for high speed data transmission with data switching facil ities of international standard. "The Biblioj .raphic Informatics Division of National mformatic Centre (ICMR-NIC centre) successfully met all the c jmmitment to provide globally health information to users through various

sources such as remote data >ases, CD ROM data bases and from INTERNET[2]. However the ICMR institute libraries are neither utilising this service fully due to lack of infrastructure facilities and network environment nor able to accommo' iate new perspectives in document delivery services available with the emerging information technologic:. The ICMR has to develop a strategy for improving the situation in order to achieve the communicai ion of health science research information at national and global level.

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