### University of Nebraska - Lincoln

## DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

2-2012

# An Analytical study of the Medical College Libraries of Gujarat in the Age of Information Technology

**Atul Bhatt** GIDC Rajju Shroff ROFEL Institute of Management Studies

Follow this and additional works at: https://digitalcommons.unl.edu/libphilprac



Part of the Library and Information Science Commons

Bhatt, Atul, "An Analytical study of the Medical College Libraries of Gujarat in the Age of Information Technology" (2012). Library Philosophy and Practice (e-journal). 697. https://digitalcommons.unl.edu/libphilprac/697



## http://unllib.unl.edu/LPP/

## Library Philosophy and Practice 2012

ISSN 1522-0222

# An Analytical study of the Medical College Libraries of Gujarat in the Age of Information Technology

Dr. Atul Bhatt Sr. Librarian GIDC Rajju Shroff ROFEL Institute of Management Studies VAPI, Gujarat, India

#### Introduction

The advent of Information and Communication Technologies and Impact of Information explosion have brought many changes in diverse field of knowledge, especially in medical sciences which had profound impact on medical professionals, practitioners, students in pursuing their research and patient care. The medical professionals require pinpointed, accurate and speedy information for updating their knowledge. Due to the elasticity of budgets and increases in journal and book prices every year, keeping in view of user needs, libraries are forced to join a consortium. Medical education aims at developing medical manpower suitable to the needs of the country. The medical manpower produced in the state of Gujarat is in thousands. It is no exaggeration to state that libraries are one of the primary sources of knowledge to this manpower. The medical college libraries have a crucial role to play directly in the promotion of medical education and health care information and indirectly in various health welfare programmes.

## **Literature Survey**

Chatopadhyay and Ghatak (2008) revealed the infrastructure, services in dental college libraries in Kolkata they conclude that library professionals should acquire IT related skills, academic and professional qualities for providing good quality library services to user. Womboth and Abba (2008) found that The Federal University of Technology, Yola library has embraced ICT in its services. Catalogue cards are now produced by computer. FUTYLIS, locally developed software, is being used to prepare the library's OPAC. This is to be replaced by the more comprehensive ALICE FOR WINDOWS Software in order to completely offer online services. Out of the eight academic librarians, six are computer/Internet-literate. The library has seven computer operators. Howse, Bracke, and Keim (2006) describe Arizona Health Sciences Library has collaborated with clinical faculty to develop a federated search engine that is useful for meeting real-time clinical information needs, they described the collaborative model used for developing technologymediated services for targeted users. Wang, Gui-Zhi, et al. (2006) they described that, Medical Libraries should take the responsibility to provide medical information service for public health emergencies in the areas where they are located. Medical libraries can improve their selective information dissemination service for policy-makers, scientific worker, healthcare professionals, and the public by making use of the on-line update holdings with modern information technology. V. S. Cholin (2005) stated that IT has revolutionized the information handling activities in research and academic libraries in India.. The university libraries in India are at various stages of development in the application of information technology tools in their day-to-day activities

described that libraries provides effective access to resources available within universities and elsewhere. Halkar and Gupta (2005) they observed that user is the supreme leader of any kind of information system. The benefits of information revolution are centering on the user and their convenience. The third and fourth laws of library science viz. lay emphasis on the importance of the user's research and his or her time. Rathinasabapathy G. (2005) observed that the Internet gives access to a huge collection of health information to patients and professionals. Further, the training required for Librarians and Medical Professionals for evaluation of online healthcare information resources.

## **Objectives of the Study**

- To examine the present status of library services in medical college libraries of Gujarat
- To examine the status of library resources in medical college libraries of Gujarat.
- To study the present status of human and other infrastructural facility of medical college libraries of Gujarat.
- To find out the status of IT infrastructure facilities as well as Automation status in library operations and services in Medical College Libraries of Gujarat.

## Methodology

Questionnaire based survey as well as the case study approach has been employed in the said study data was collected through the surveys based on well structured questionnaire and personal interviews, In-depth literature search on topics related to the research work was carried out in other sources also reviewed.

## **Findings**

General Information

Table 1: Status wise distribution of Respondents

Type of Management	Distributed	Received
Government Colleges	6	6
Municipal corporation	2	2
Private Trust	5	5
Total	13	13

Questionnaires were distributed to all the medical college libraries of Gujarat. Medical colleges which run M.B.B.S. or post M.B.B.S courses are considered for the study there are thirteen medical colleges run this program in Gujarat. Questionnaires were distributed to all medical college libraries.

College Establishment

Table 2: Establishment Year

Sr. No	Year	Number of Colleges
1	1940-1970	5

2	1971-1990	1
3	1991-2007	7
Total		13

First medical college was established in British period was B.J. Medical College, after British period government has decided to start medical education at various level. According to MCI norms institutes have to establish the central library since inception of the college, so all the medical college libraries were established at the time of college establishment year. Table 2 explains the duration of medical colleges established in Gujarat.

Courses Offered

Table 3: Status of Courses Offered

SI.No	Courses	Number of Colleges
	UG	13
	PG	09
	Research Work	04

Table 3 indicates that 100% colleges offered the UG level course. Among the 9 colleges offered PG courses and 4 Medical colleges offered research programmes.

## **Library Users**

Faculty, students and library are a trinity in a medical college. The institute cannot do well if any of these three pillars are not strong enough. In his report Dr. Radhakrishnan said that, the library is the heart of an academic institution. We can say that students are the soul and faculty is the blood being circulated in the veins of an academic institution.

Table 4: Status of Users

SI.No	Category	Up to 200	%	201-400	%	401 - 600	%	Above 600	%
1	Students	1	7.69	2	15.38	5	38.46	5	38.46
2	Faculty	6	46.15	7	53.85				
3	Others	2	15.38						

Users are the key components of the libraries and information centers. The data is presented in table 4 shows that the number of users in various medical college libraries. Only 2 libraries are providing a services to medical professionals from the outside the institute. It is very poor rate in open access publication age.

## **Library Collection**

keeping in the view of collection as an important variable in the study, the respondents were asked under major categories of documents, for the sake of clarity and convince in the interpretation, the collection of these libraries has been classified under two broad groups: Book materials and non books materials and results are presented in the following Table 5.1 to 5.2

Table 5.1: Library Collection - Books

Range	Books		Handbooks /Reference books		
	No. of Libraries	Percentage	No. of Libraries	Percentage	
Up to 5000	-	-	8	61.54	
5001 to 10000	5	38.46	3	23.08	
10001 to 15000	3	23.08	2	15.38	
15001 to 20000	2	15.38	-	-	
20001 to 25000	1	7.69	-	-	
Above 25000	2	15.38	-	-	

Table 5.1 presents data about availability of books and handbooks /reference books in different medical college libraries. It is also observed considerable numbers of resources available to serve health science professionals.

Table 5.2: Library Collection – Other than Books

Range	Journals		Back Volumes (Journals)		Research Reports		Theses and Dissertations		Conference proceedings ar papers	nd
	No of Libraries	%	No. of libraries	%	No. of Libraries	%	No. of libraries	%	No. of libraries	%
Upto 50	1	07.69	-	-	2	15.38	1	07.69	6	46.15
51 – 100	6	46.15	-	-	2	15.38	1	07.69	-	-
101 – 150	1	07.69	-	-	1	07.69	-	-	-	-
151 – 200	-	-	-	-	-	-	1	07.69	-	-
201- 250	-	-	1	07.69	-	-	-	-	-	-
251-	-	-	3	23.08	-	-	-	-	-	-

300									
Above 300	-	-	9	69.23	-	 5	38.46	1	07.69

Table 5.2 presents data about availability of different learning resources like current journals, back volumes, research report, thesis and dissertation and conference proceedings. It is also observed that considerable numbers of resources are available to serve health science professionals and it is also highly preferable in area of medical education.

#### Nonbook Material

Non book material is an integrated part of the modern health science libraries and comes in a variety of shapes. In order to ascertain the state of non book materials and their relative share in the collection of these medical college libraries, the respondents were asked to furnish the state of their NbM.

Table 5.2.: Library Collection – Non-Book Materials

Range	Audio-Video		CD-ROM		Slides		Online Databas	ses	E-journals	
	No. of libraries	%	No. of libraries		No of libraries	%	No. of libraries	%	No. of libraries	%
Upto 250	6	46.15	7	53.85	8	61.54	9	69.23	9	69.23
251 – 500	3	23.08	3	23.08	2	15.38	-	-	-	-
501 – 750	-	-	2	15.38	-	-	-	-	-	-
above 750	-	-	-	-	-	-	-	-	-	-

During personal visit it is observed that, all libraries do not have all types of non book materials. Government medical colleges are having very good online e-resources due to fund availability by state government.

#### **Human Resources**

Table 6 : Category of Staff in Libraries

Strength of Staff	Professional	Non-Professional
One	5 (38.46)	7 (53.85)
Two	6 (46.15)	3 (23.08)
Three and above	2 (15.38)	3 (15.38)
None	13 (100.00)	13 (100.00)

Table 6 indicates that the strength of professional and non professional staffs in the medical colleges of Gujarat is very poor, majority of medical colleges have inadequate staffs for library services.

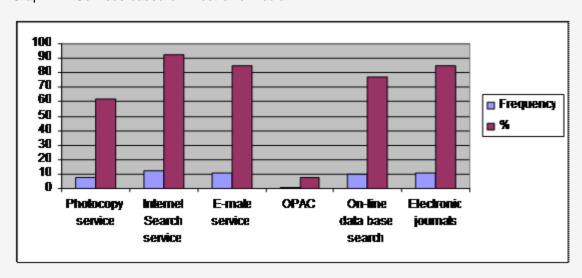
## **Library Services**

Table 7: Types of Services offered by Libraries

Sr. No	Services	No. of libraries	%
01	Inter library loan	8	61.54
02	Reference Services	11	84.62
03	Referral service	8	61.54
04	Abstracting Service	2	15.38
05	Indexing Service	2	15.38
06	Current awareness service	11	84.62
08	Selective dissemination service	9	69.23

During the personal visit it was observed that lending is the main service offered by these libraries where as most of them are also providing reservation services. most of libraries are Open Access. However, Table 7 discloses that

Graph 7.2 Services based on Electronic Media



## **Technical Processing**

Table 8.1: Classification Scheme Used

SI.No	Scheme	No. of libraries	Percentage

01	DDC	12	92.31
02	UDC	-	-
03	СС	-	-
04	Others	-	-
05	No Response	01	7.69
	Total	13	100.00

Table 8.2: Catalog Scheme Used

SI.No	Scheme	No. of libraries	Percentage
01	AACR	11	84.62
02	СС		
03	Any other		
04	No response	2	15.38
	Total	13	100.00

## **Library Automation**

The first step towards availing benefits of IT is the automation of library activities. Hence, librarian were asked about the status of automation in their libraries the response of librarians are mentioned in frequencies

Table 9: Status of Library Automation

Sr. No	Status	No. of libraries
1	Fully Automated	3
2	Partially Automated	7
3	Proposed	3
	Total	13

Table 9 shows the difference in the percentage of fully, partially, and proposed automated libraries. It means that there is significant difference in the percentage of libraries, which are automated at different levels. It is also evident of from the above table medical college libraries in the Gujarat have taken a long period in starting library automation of their services. The connotation is that the process of computerization has entered very slowly in the library system.

#### Hardware

Table 9.1 indicates the status of computer availability for client systems. Two (15.38%) Libraries have responded that they have excellent number of hardware systems. But the majority of the libraries have responded that they have good 7 (53.85%) and very good 3 (23.08%) number of systems only one (7.69%) library have responded that they have average hardware. The inference that could be drawn here is that the majority of the libraries have adequate hardware for the client(s) also to use for the library automation purpose.

Table 9.1: Status of Availability of Hardware for the Client(s)

Response	No of libraries	Percentage
Poor	0	0
average	1	07.69
Good	7	53.85
Very Good	3	23.08
Excellent	2	15.38
Total	13	100.00

## **Operating Systems**

Table 9.2 indicates computer operating systems

ODEDATING OVOTEMO	VE0	D
OPERATING SYSTEMS	YES	Percentage
MS - DOS	0	0
Windows 95/98/2000/	3	23.08
Windows ME/ NT	2	15.38
Windows XP	6	46.16
Windows Vista	2	15.38
Unix	0	0
Linux	0	0
Total	13	100.00

Table 7.2 gives an overall picture of the different operating systems for clients available in libraries. It is observed from the table that the majority of the Medical College Libraries are using

most popular operating windows XP because it can be used for client side without hindering the speed of the library application software whereas some libraries have installed windows Vista. Which connotes they were aware of the software development and keep pace with the new software development.

#### **Local Area Network**

The ideal situation for a library is to be connected to a campus backbone, so that library resources can be accessed not only from within the library but from anywhere on the campus. Table 9.3. indicates that a considerable number of libraries 9(69.23%) have accessibility to server in central library. Where as 5(%) of libraries have accessibility to server in all over the college campus. Significance result of this data is that B. J. Medical college; Ahmedabad is one of the regional centres of National Medical Library of India and through NML BJMC is also connected with other health sciences networks like HELIS.

Table 9.3: Availability of Local Area Network

SI.No	Type of network	In-house		Campus	
		No. of libraries	%	No. of libraries	%
01	LAN	9	69.23	5	-

## **Availability of Internet**

Table 5.7.7: Availability of Internet

Availability of Internet Facility at library	No. of libraries	Percentage
Yes	12	92.31
No	1	7.69
Total	13	100

High-speed Internet access is very much essential to access digital sources of information like online databases, e-journals, etc. Table 5.7 presents data availability of Internet access at different medical college libraries. Majority of libraries have Internet access.

#### Conclusion

From the study, it is evident that IT infrastructure in the medical college libraries of Gujarat is still in different stage of development, the status of library automation in these libraries is not encouraging. There is a clear lack of e-resources in self financed colleges due to non availability of financial aid, more stress need to be given on human resource management. Hence, there is an urgent to plan, implement and develop ICT infrastructure to be fit in facing the challenges ahead of them.

#### References

Chatopadhyay, T., & Ghatak, N.C. (2009). An analytical study of the dental college libraries in Kolkata in the age of Information Technology. *SRELS Journal of Information Management* 45 (1), 45-53.

Cholin, V. S. (2005). Study of the application of information technology for effective access to resources in Indian university libraries. *The International Information & Library Review* 37(3), 189-197.

G, Rathinasabapathy. (2005). A study on the problems with online healthcare information resources: Application and operation Standards for Health Science Libraries in Digital Era. Bangalore, National Convention of Medical Library Association. Programme Documents.

Gui-Zhi, Wang (2006). Establishment of public health emergency information service system in medical libraries of china. World Library and Information Conference: 72 IFLA General Conference and Council, 20-24 August 2006, Seoul Korea. Available: <a href="http://www.ifla.org/lV/ifla72/index.htm">http://www.ifla.org/lV/ifla72/index.htm</a>

Halkar, G. J., & Gupta, S. (2005). Impact of IT on Health Professionals and their Needs Assessment: A Case Study: Application and operation Standards for Health Science Libraries in Digital Era. Bangalore, National Convention of Medical Library Association. Programme Documents.

Howse, David. K., Bracke, Paul. J., & Keim, S.M. (2006). Technology mediator: A new role for the reference librarian? *Biomedical Digital Libraries* 3(10). Available: <a href="http://www.bio-digilib.com/content/3/1/10">http://www.bio-digilib.com/content/3/1/10</a>

MCI (Medical council of India, New Delhi). Available: <a href="http://www.mciindia.org">http://www.mciindia.org</a>

Womboh, B.S.H., & Abba, T. (2008). The state of Information and Communication Technology (ICT) in Nigerian university libraries: The experience of Ibrahim Babangida Library, Federal University of Technology, Yola. Library Philosophy and Practice (December) Available: <a href="http://unllib.unl.edu/LPP/womboh.htm">http://unllib.unl.edu/LPP/womboh.htm</a>