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CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION TO LIBRARY

Library is the creation of our cultural maturation. It is essentially a response to the total communication pattern of modern society. The advent and advance of democracy; the extension of the horizons of education, the intensification of research, interdisciplinary approach in education and research, and the virtual explosion of knowledge and information sharing have necessitated the services of a well-stocked, well-staffed, well-organized and up-to-date library.

A library plays a fundamental role in ensuring the achievement of higher degree of research. The vital activities of university libraries include the collection development, document delivery, reference service, user education, access to electronic resources, etc. Academic libraries are exempted from provide effective rate and reliable access to information using the state-of-the art information technology equipment. Information technology has revolutionized the information handling performance in the educational libraries during the past few years. The information society demands that all the relevant technologies; that are involved in information processing consolidation, repackaging and retrieval be merge to evolve an integrated system; capable of providing diversified services. In this direction, the automation of college libraries and university libraries is the first step rather a pre-requisite for the development of such a college library, university library and information system. The promising trend in the development of information services with effective computerization of these libraries will facilitate the optimum utilization of information resources (Murison, et al., 1971).

Research in science, social sciences, engineering and technology and pharmacy is well established. The need of the research and advancement in library science is still not justified. This is especially true in developing countries like India. Social and economic pressures are built up in such a way that makes more and more persons to go in for research degrees and research projects. It is being increasingly realized that research in Library and Information Science can play a very important role in finding the solution to the problem faced by librarians/information scientists. It is considered that research programmes will enable the profession to achieve greater academic and professional respectability.

Automation in library is seen since long time in very few organization libraries but not universally applied. It is nevertheless to take off in college libraries in India owing to different
problems. In present time, there are numbers of factors that contributes the information. Every
economic and political power for the administration requires information based on the survey
and research. In fact, information rich countries of today are becoming richer and powerful than
before because of expertise in creating new knowledge and information and its effective and
efficient utilization. The availability of the information and facilities to store and explore it, give
the technological, political and more socio-economic benefit to a country. It has also a
fundamental value of enriching a country to provide a high quality social life to its people.
According to Pitroda, “Knowledge is essential for initiative. Only from initiative, you bring out
action. And only through action, you begin to implement programs and projects for prosperity”
(Misra, 1979).
Library and society are inter-linked and mutually dependent. Society without libraries has no
meaning, and a library without society has no origin. Commenting on the role of library in
society, J.H. Shera writes, “The library is a product of our cultural maturation”. It came into
existence when societies ceased to be nomadic and started becoming urbanized, and when
graphic records became important to the effective operation of organized human relationships.
Modernization of libraries is essential for research activities in the field of pharmacy. Library
facilities should be develop as a part of total programme of college. It should provide latest
development in the specific area of their interest. Today more than 1259 pharmacy colleges and
102078 students are in pharmacy education (www.aicte.org). In India, 23,000 Pharma Firms are
functioning with an annual intake of about 25,000 students and 29, 00,000 employees quite of
them have good library facilities to foster wide reading and access to the required information for
their research work. More than 20,000 scientific and technical articles are published worldwide
in a day (Issac, et. al., 1993). As such, knowledge of information sources is necessary for the
medical professional who is relating to pharmacy directly or indirectly. Pharmacy colleges and R
&D centres where research activities take place should have facilities to provide up to date
knowledge to the researcher on pharmaceuticals by utilizing high technology available in related
areas. Both qualitative and quantitative aspects of education are controlled with a good library,
no one compromises it. The major focus in education and R & D centres for the masses needs to
be the teachers, researchers, and pharmaceutical scientists to obtain for proper development of
the talent a good library with all the facilities and library serving along with modern
computerization systems is almost (Balasubramanian, 2006).
1.1.1 Importance of pharmacy

As the healthcare industry is undergoing an unprecedented boom, bright career avenues in pharmacy have also begun to proliferate at a hitherto unknown scale. Pharmacists play a vital role in day-to-day life, as they are involved in the research and manufacture of drugs. Pharmacy is known as a branch associated with the study of preparation of medicines. The word ‘Pharmacy’ was evolved from the Greek word “Pharmakon” which means drug. Today, there is vast and growing pharmaceutical industry in India. The increase in number of hospitals nursing homes and pharmaceutical companies is a clear indication of the growing scope in the area. Pharmacy also offers ample job opportunities. Pharmacy, as a career option is very much in demand. India is a nation with over one billion of population and is prone to both minor and major diseases due to lack of healthcare facilities. But now, in this era of technological advancement, these diseases have been brought under control with the help of medicines, and this is where Pharmacy has stepped in as a blessing [Ash (2004) & Agrawal et al. (2008)].

The objectives of pharmaceutical education are to provide scientific and technological guidance in all aspects relating to recognition, standardization, formulation, preparation, allocation, superiority promise and use of drugs and medicines, spreading of drug information and management of disease, abuse of drugs and operation of laws governing drug misuse and development of innovative facts to additional strength pharmaceutical services. The education system should allow a pharmacy graduate/postgraduate and his/her expertise to fulfill position of liability in education, pharmaceutical production, drug control, promotion and sale of pharmaceutical production, drug control, marketing and sale of pharmaceuticals and hospital pharmacy. Pharmacy as a profession requires students to be more resourceful, dedicated, disciplined with strong character and interest to serve the society.

Every library expected to support the objectives of the pharmacy college and should have reference collection with general and specialized works like encyclopaedia, yearbooks, directories, serials, non-book materials and collection of standard treatises in various branches of pharmacy education. The reader does not get benefit of most important services like Current Awareness Services (CAS), Selective Dissemination of Information (SDI), indexing and abstracting services; inter library loan services and other library online services [www.pci.nic.in & Srivastava (1954)].
The pharmacy college library should provide latest development in the specific area of the interested researcher. It is noted that more than 20,000 scientific and technical articles are published worldwide in a day. Therefore, the library and librarians of pharmaceuticals should be able to meet this information explosion in information technology. However, the services of health and medical science are fast developing that within 3 to 4 years it doubles. Due to the ever-developing nature of pharmaceutical technology, it is needed to upgrade the subject knowledge in depth. As such, knowledge of information sources is necessary for the medical professionals, who are related to pharmacy directly or indirectly (Sagar, 2006).

1.1.2 Collection development and management

Collection development has been described as one of the most discussed but least understood areas of librarianship. Libraries have always had collections that grew-and, in that sense might be said to have developed. There is, however, more to the growth of a collection than simply acquiring materials; someone must decide which materials will be acquired and through which methods. This implies that selection decisions must be made, perhaps in accordance with an overall plan for the development of the collection. Nowadays, the term "collection development" has come to include a broad range of activities related to the policies and procedures of acquisition, selection, and evaluation of library collections. As collection development began to be seen as a library function distinct from acquisition procedures and broader than selection alone, the exact relations of the terms were not always clear (Chopra, 1994).

Since the dawn of the civilization, man has been striving to know the unknown. On the long voyage of exploration of unknown, man has collected uncountable pearls & pebbles and tried to preserve them. Undoubtedly, this is a very fundamental attitude of humanity that initiated the concept of preservation of thought contents or knowledge, that concept of preservation gave rise to the concept of library latter on and that knowledge brought in various forms of library collection (Gelfand, 1974).

In the context of library, collection of materials includes- Books, Periodicals and Serials publications, Government publications, Academic Thesis and Dissertations, Research Reports, Annual Reviews, Conferencing Proceedings, Pamphlets, Standards & Specification, Patents, Trade Literature, Maps, Atlases, and Globes, Photographs, Illustrations, Painting, Microfilms, Microfiches, Rare Books, Manuscripts, Slides, Audio Cassettes etc. and also electronic media
like computerized databases, Floppies, CD-ROM, DVD, e-journals, e-books, e-thesis, Internet etc with other special materials in addition to books as principal constituent. The Building means development of those documents and other special materials in addition to books as principal constituent (Katz, 1980).

**What do you understand by collection development?**

Collection development is the term useful to the set of practices employed by libraries to manage, build and maintain collections resources. These comprise;

- Selecting titles to acquire in all formats
- Establishing and managing approval plans
- Monitoring the curriculum and developing relationships with the faculty who shape it
- Developing the fiscal resources required to support these needs
- Determining conservation treatment or replacement
- Selecting resources to be reformatted to expand their utility and extend their usefulness
- Selecting titles to withdraw from the collection
- Negotiating license terms that are cost-effective and permit the broadest possible use
- Determining the titles that are moved to off-campus storage and develop recall mechanisms that meet research needs

1.1.2.1 Collection building

Collection building is an essential procedure in developing and building of a library collection to serve study, schooling, research, entertaining and other needs of library users. The process includes assortment and deselection of current and conservative materials, the planning of strategies for continuing selection, acquisition, preservation and evaluation of collections to decide how well they serve user requirements. Library collection development comprises many functions like purchasing and removal of expired materials. Today library collection does not mean the holding of particular library which its own only, but which it can collect on loan
from some other sources as well as can have access to collections and databases, conventional or electronic. Collection development and collection building, these two terms usually are used synonymously but the collection management differs very slightly. Collection building is collecting material and its management according to the requirements of the users and readers requirements. It also includes its arrangement, organization and maintenance. It should be made accessible to the users (Srivasava, 1994).

In this era of electronics, the collection development is facing challenges. With the advancement of electronic development, library collection should have to be advance to withstand the need of the students and users for the development and distribution of the material is formed. So to compete with the time, library is changing with the requirement of the users to fulfil the need of them (Tebbetts, 1996).

1.1.3 Computerization in library

The advent of computer has also brought a revolution in the field of library science. The conventional print material is converted into the digital form. Digital form is the electronic science which belongs to the number which transfers information in term of readable efforts. The electronic form means the copy can be generated in the numbers of format at any place. Paper work becomes meaningless and costly process for the assessment of the materials. It doesn’t serve as popular media of the public access. Today, digital is synonymous with computers. Libraries are no exception to this first changing digital environment. Library in digital environment is computer using system for the easy access, acquiring, storing, organizing, searching and distributing materials as per the need of the users (Asgeirsson, 1993).

Since last few years use of the computer and typewriter are the debating topic in the library. Whether it can be used as simply or it could be restricted from use in the library. Many research articles focus on the use and its benefits in the library. Nowadays, the library community is believing that computers and information technology (IT) in general are the tools of new information era which was started with Gutenberg and lasted until the middle of the twentieth century apart from the immediate practical advantages (Zakari, 1994).

All the libraries comprise both print and digital collections. They offer the same to users as per their conveniencey. The digital material is highly emphasises for the journals, magazines, and abstracting and indexing services by the library. The advent of the digitalization of book is now
going to be settled down in the materials collection. There are number of reasons for the selection of the digital materials. It is not only limited to digital journals which can be only easily access and included in the digital database (Clason & Dormody, 1994).

1.2 PROBLEM NARRATION AND JUSTIFICATION

The research problem conceived under the title “A Study of Collection Development, Management and Computerization of Pharmacy College Libraries Located in the Central and North Gujarat Region” venture to examine collection, development, management and computerized facilities available in all pharmacy college libraries of north and some part of the central Gujarat. The main aim is to develop collection methods in the library and computer services using information technology to the greater production and to help achieve the distinction in the subject field.

The topic play vital role in the research disciplines. It decides the worth and validity of the work. The topic must show a new horizon in the concern area of the study. It must add to richness of the subject with this precondition in mind researcher has selected to work on collection development, management and computerization of libraries related topic. It is hoped that the study will give the state-of the-art of the present infrastructure related to information technology, library automation and networking, the level of use of housekeeping operations using library software. The study would also provide library managers, professionals and policy makers with some clear insights about the benefits of using library software.

The information explosion and recent development problems are in procuring, organizing and disseminating information for librarians and the actual users. The exponential growth of Pharmacy and Health related literature is creating numerous problems. Even the biggest library system cannot afford to procure all the documents even on a micro topic. No individual can retain in his memory all that he reads. His current future interest and the traditional library tools have become considerably ineffective in providing the specific information of an individual’s interest.

The present scenario in the field of pharmaceutical education & research shows that there are many drawbacks in the adequate library. Many educational institutes and R &D centres do not have sufficient library sources and effective network system. In the lacuna of these facilities,
teachers, researchers, scientists and decision maker face many problems due to lack of effectiveness. Duplication of research work adversely affect on manpower and money. This fact shows that Gujarat has a well-developed pharmacy field but all the pharmaceutical education and research institute do not have an effective information system which is required by this field. The dominated library & information centre face money crisis. Information explosion, interaction in information sharing to overcome this problem establishing and effective balanced information network is the only solution. Therefore, researcher has invested his brain to develop a proper network in the field of pharmacy for Gujarat.

With concentration on the objective the listed below questionnaires is formulated.

1. What is the status of collection development and management methods in pharmacy college libraries of north and some part of the central Gujarat?
2. What is the nature of material available in the library of selected colleges in north Gujarat area?
3. What is the situation of computer based information resources in pharmacy college libraries of north and some part of the central Gujarat?
4. What is the current position of library automation in pharmacy college libraries of Gujarat?

1.3 NEED OF THE STUDY

The success of an education system depends upon the skills and capabilities of its teachers. It is a known fact that teachers can update their knowledge through the habit of reading the material provided by the library. Libraries of colleges of education supplement their parent institutes in attaining educational goals to meet the information needs of present and future teachers. It becomes essential to ascertain the use of libraries to find the strengths and gaps of libraries to plan for improvements in the future.

Modern library system is very complicated and multi functioning organization involves numbers of procedures. Traditionally this procedures and functions include materials acquisition, classification and cataloguing, interlibrary loan and circulation, serials management, and reference services. The important responsibility of the library is to provide facility and service to the users since long time librarians managing document acquiring in warehouses, cataloguing and classification of books, journals, other materials and its
distribution to the clients. Computer and information technology makes the procedure easy to organize, retrieve, and transfer the original information and materials.

The plentiful growth of the published literature year after year has led to the phenomenon of literature explosion of information explosion. An observed growth of published literature is very difficult for libraries to maintain comprehensive acquisitions of documents. It is due to the number of publication and its cost that increase year by year. This has led to the role of libraries or information centre changing from acquiring comprehensive collections to provide access to comprehensive collections available in various libraries or information centres. This information revolution which began in the 1950s and availability of low price microcomputers in the 1980s have encouraged a large number of libraries in the developing nations also to automate libraries and information services. The advances in the computing and communication technologies have made inroad to this libraries as well, and the major thrust of their activity has gradually shifted to meeting the challenges of the providing right information at the right time to the right user by making the combination of the computing or communication technologies or what is called is the information technology. The present scenario is such that not only we are overloaded with information, but also overloaded with the task of choosing the right information. The information is no longer interested in debating over traditional versus modern methods of information collection and processing; the main attention now is to how effectively one can make use of the available computing and communication technologies and how libraries can effectively share the information resources within the country and also with other countries; or in other word, enter into information network.

Gujarat has been one of a kind principal state in country which provides pharmacy education. There are around ninety-three colleges in Gujarat that are approved or recognized by the Pharmacy Council of India (PCI). These colleges offer undergraduates and postgraduates and some of them undertake research program leading to Doctorate Degree in pharmacy streams. To accomplish this it is necessary that pharmacy college library have to composite for the sharing of materials and also to put their efforts to jointly access resources available elsewhere.

1. To establish referral centre for maintaining books and central on-line union catalogue, non-book material and serials of all participating libraries.
2. To promote sharing of resources among the libraries of pharmacy colleges and research organizations by collecting, storing, disseminating information and by offering computerised service to the users.
3. To make the user facilitates with the material not available in the library by network system participation.
4. To maintain the collection materials and try to avoid the duplication of materials already available inside the library.
5. To develop a specialist bibliographical database of books, serials and non-book material for search and access for users.
6. To use and maintain the fast communication facility for the maintenance and retrieval of the materials.
7. To establish uniform guidelines, procedure, methods, hardware, software and services for adjustment and maintenance to sharing, pooling, facilitate and exchanging resources and services.
8. To collaborate with the international and national centre for the sharing and exchange of the required materials.
9. To establish the projects specialists and other organization for providing online information services.
10. To assist locating out of print material and to facilitate fast retrieval in special areas.
11. To take initiative for promotion of pharmaceutical research, development and innovation of information technology in pharmacy field.
12. To prepare module of pharmaceutical colleges / institutions.

1.4 AIMS AND OBJECTIVES OF THE RESEARCH

The proposed study focuses on the collection development, management and computerization of pharmacy colleges’ libraries in the north and some part of the central Gujarat. The pharmacy college library must provide present and future requirement of modern society, teachers, researcher scholars, and health care professionals. Main objectives of the study are:

1. To collect the data regarding the pharmacy colleges in north and some part of the central Gujarat.
2. To explore the current practices of collection development and management of libraries.
3. To study the status of computerization in pharmacy college libraries.
4. To recommend practicable guidelines for improved collection development programme.
5. To study the emerging new information environment that affects the collection development activities in college libraries.
6. To make an overview of the existing collection development policies and strategies and their application to Indian University library environment.
7. To suggest policies for collection development suitable to pharmacy colleges.
8. To ascertain frequency of users visit libraries and types of resources and services do they use mostly.
9. To know the purpose of users for employing.
10. To find whether libraries are adapting to IT environment and what impact it has made on library use.
11. To ascertain whether users are satisfied with their libraries or not.
12. To identify the problems being faced by users using these libraries.
13. To find attempts are being made by the library staff to promote library use and problems do they face in doing so.
14. To make suggestions for improving inadequacies so as to increase library use.
15. To collect the data of information resources stored at the library and information canters.
16. To find out collection development policies of material adopted by the libraries and evaluate such policies and practices.
17. To find out the status of IT infrastructure facility as well as automation in library operations and services and its future planning in pharmacy college libraries.
18. To know the present status of library services in pharmacy college libraries of Gujarat.
19. To know the status of library resources in pharmacy college libraries of Gujarat.
20. To study the present status of human and other infrastructural facility of pharmacy college libraries of Gujarat.

1.5 SIGNIFICANCE OF THE STUDY
The resources and services of libraries are channelized for users. The success of a library can be measured not by its attractive building or by well selected documents, but by the extent of use of its resources and services. It is important to know whether libraries satisfy the requirements of users or not. This research has been undertaken for the study of collection development, management of the modern pharmacy college’s library and ascertains the use of the computerization of libraries of pharmacy colleges by students and teachers. It is an attempt to find the users’ awareness and use of resources and services and their satisfaction with these. It will be helpful to formulate policies to fill gaps wherever needed.

In the present days more and more organizations are participated in research, action-research and advocacy on various development issues, mostly in pharmaceutical field. Most of the topics and issues are interdisciplinary in nature and are characterized by overlapping subject boundaries. The subjects overlapping are such as Medical Sciences, Genetic Engineering, Biotechnology, Strategic Management, Mathematical Statistics, and Computer Science etc. They are actively associated with research to generate new knowledge. They should be empowered with available all types of information resources in interested field. E-resources and open sources are widely used by user’s community but they face several problems. If all these resources are made available to them, the major problem regarding the empowerment of knowledge can be solved.

The library and information centre which intend to serve its users effectively and efficient will have to organize its services keeping in mind the specialization of its users as well as their level of specialization. Each user community has its own characteristics, requirements, behavioural pattern, reading habit, distinct pattern and limitations.

The main requirement for the present investigation based on fact that no specific study on the present state of Gujarat for pharmacy libraries. This proposed significant pharmacy college libraries will be helpful in the below listed topic:

1. The study would particularly benefit the students and faculty members of pharmacy College Libraries of north and some part of the central Gujarat.
2. The proposed study provides information about the collection development and management and computerization of the modern libraries.
3. It will coordinate efforts for suitable collection development and reduce unnecessary duplication wherever possible.

1.6 SCOPE AND LIMITATION OF STUDY

Scope and limitations are the two cardinal factors responsible for timely completion of any social investigation. The term scope includes more than a mere designation of the population being studied. However, the scope must also include characteristic specification of the study. The research does have the implications beyond the immediate data; since it was designed with that notion, but these implication need to be stated clearly. Scope and limitations also pave the way for stating how far the data have actually carried the problems being investigated, thus clearly indicating the limitations of the investigation.

The major emphasis of the present study is on pharmacy college libraries of the north and some part of central Gujarat, which is restricted to Ahmedabad and Gandhinagar district that are government or self financed. However, the study has some limitations. The study is restricted to the libraries of 28 pharmacy colleges established till date. In this case, data has been collected from the pharmacy colleges’ library. All the self-financed colleges that have been included in the study have been established during last few years and their libraries are still at infancy stage.

The present study has been an attempt to assess collection development, management and computerization of pharmacy colleges’ libraries and its use by students and teachers. In addition, administration, organization, resources and services of these libraries have been examined. The present study is restricted to the libraries of only 28 pharmacy colleges of north and some part of central Gujarat. The present study is therefore limited to 28 pharmacy college libraries of north and some part of central Gujarat. The names of these colleges are as under:

1. A.P.M.C. College of Pharmaceutical Education & Research, Himmatnagar
2. A-One Pharmacy College, Ahmedabad
3. Arihant School of Pharmacy & Bio-Research Institute, Adalaj
4. B. S. Patel Pharmacy College, Linch
5. B.V. Patel PERD Centre (Niper), Ahmedabad
6. Dept. of Pharmaceutical Sciences, HNGU, Patan
7. I. K. Patel College of Pharmaceutical Education & Research, Himmatnagar
8. K. B. Raval College of Pharmacy, Shertha  
9. K.B. Institute of Pharmaceutical Education and Research, Gandhinagar  
10. K.J. College of Pharmacy, Vadasma  
11. Kalol Institute of Pharmacy, Kalol  
12. L.J. Institute of Pharmacy, Ahmedabad  
13. L.M. College of Pharmacy, Ahmedabad  
14. Nirma Institute of Pharmacy, Ahmedabad  
15. Nootan Pharmacy College, Visnagar  
16. Radhe School of Pharmacy & Bio-Research Institute, Hirpur  
17. Sal Institute of Pharmacy, Ahmedabad  
18. Saraswati College of Pharmacy, Ranela  
19. Saraswati Institute of Pharmaceutical Sciences, Chiloda  
20. Shankarsinh Vaghela Bapu Institute of Pharmacy, Vasan  
21. Sharda school of pharmacy, Pethapur  
22. Shree Krishna Institute of Pharmacy, Shankhalpur  
23. Shree M. V. Shah Pharmacy College, Gajan  
24. Shri S. K. Patel College of Pharmaceutical Education & Research, Kherva  
25. Shree Swaminarayan Sanskar Pharmacy College, Zundal  
26. Shri B. M. Shah College of Pharmaceutical Education & Research, Modasa  
27. Shri Sarvajanik Pharmacy College, Mehsana  
28. Shri Swaminarayan College of Pharmacy, Kalol

All the important aspects of the above twenty-eight college libraries have been critically examined and studied based on data collection, personal visits and discussion with librarians. Study of present work has been done taking into consideration the research time and available resources. More clear and limited the problem, the deeper clear and useful research work. So looking at the situation, the scope and limitation in present fieldwork can listed as:

1. Comparison of the libraries belonging to huge homogeneous group produces more complicated results.
2. No in-depth study has been made earlier to ascertain the use of libraries of Pharmacy colleges in the state. Only a few studies focusing on the higher educational institutes have been conducted.
3. Performance indicators are valuable tools in monitoring the achievements of the library. As there is lack of reliable information, the key performance indicators such as loans per capita; loans per item; total library visits per capita; unit costs for functions, services, and activities; and total costs per visitor could not be used to evaluate the library. This is also a limitation of the study.

4. The evaluation of the users on the library resources and services are not always reliable as these services are based on their limited needs and views.

1.7 HYPOTHESIS

There are 28 pharmacy colleges in north and central Gujarat region. It is supposed that all of them possess very good library infrastructure, but the young institutes faces the problems like inadequate library, lack of Information sources, reference books, research journals and textbooks. They also face money crisis, skilled workers, and modern technology. Very few colleges subscribe e-journals individually. Fewer amounts of libraries designed the policy for collection development and management of library materials. There are still chances of improving and adopting new technology time to time. Therefore, the users may give some suggestions to improve the existing collections and the services in a particular library. It is also supposed that users of the libraries are satisfied with the services rendered by the respective library. Lack of finance is major reason for inadequate library services. Thus, this study covers the existing situation and development in the collection development, management, and computerization in the development of the libraries of the pharmacy colleges. Moreover, library plays vital role in modern development of pharmacy profession.

1.8 RESEARCH METHODOLOGY

According to Bogdan and Taylor, the term ‘Methodology’ in broad sense refers to the processes, principles and procedures by which the researchers solve the problem and answer. The research methodology is the term how the research is done by the researchers. As in everything else the researchers do, their assumptions, interest, and goals greatly influence the methodological procedures they choose. Methods are in which the researchers:

1. Approach problems
2. Conduct research
3. Assumption, interests, theories and goals are intimately to which the researcher choose and
4. Debate over methods is really debates over theory and assumptions.

Questionnaire based survey as well as the case study approach has been employed in the said study. As the concept of computerization in pharmacy college libraries is new to the library and information field, their applications have been studied in other fields through literature search. The present status of pharmacy college libraries in India reviewed through a literature search. For the study of pharmacy colleges libraries of Gujarat, the data collected through the surveys based on questionnaire, interviews and case study. In-depth literature search on topics related to the research work carried out in the libraries of my research study area. Internet and CD-ROM database were other sources for the literature search. Beside, collection of the data through questionnaire based case studied and structured interview, as stated above, have been followed (Gyu et. al. (1987).

The core aim of the research was designing and planning a collection development, management and computerization of pharmacy college’s libraries of north and some part of central Gujarat. The present state of application of automation of library and information centers has been studied based on literature (Riggs, 1991).

1.8.1 Research design

The research design was formulated as follows

(1) Statement of problem: “Pharmacy college libraries of central and north Gujarat region: A study with special reference to collection development, management and computerization”

(2) Hypothesis and testing: Above hypothesis was tested with several mathematical methods.

(3) Objectives: Objectives of the research have defined by the researcher as mentioned earlier.

(4) Kind of resources of gathering data: Two kinds of data will be gathered using several tools.

Primary data: The data regarding library & information canter were collected for this propose by structured questionnaires issued to the library personnel. Interview and personal visit also will be plan.

Secondary data: The data was collected using institutional report, publications and from literature search.
(5) **Interpretation and analysis of data**: Analysis of the data was received by Statistical Method and Measurement. Data analysis was carried out for the Interpretation of the results. Several parameters for this work were used.

**1.8.2 Research technique**
Methodology in research is a way to solve the problem, to unfold the probable answer, and to test the hypothesis stated. As there are many roads leading to a city, likewise there are many methods to solve the problems of research.

The main aim of the research is to study collection development and management and computerization for the library facilities of the pharmacy college’s library. A survey research method was used for this study. Keeping in mind the objectives of the study, a structured questionnaire was designed to explore the feasibility of establishing network. The questionnaire based on survey method was used for data collection. These questionnaires for different users of library were distributed to all 28 college’s librarian, researchers and faculty members to get the information related their libraries. All of them returned the filled questionnaire but due to constraints of time, about 369 questionnaires were circulated among the users (students, researchers and faculty members) of 28 college’s libraries for user’s survey, out of which 290 users responded. The analysis of the data for the present study was done by applying simple percentage; the personal interview was taken to institutional library to know how the proposed network technological workout. The collected data will be tabulated and reduce to statistical tables for further analysis and interpretation (Kumar, 1992).

**1.8.3 Research tools**
Primary and secondary data were collected by using well-designed and structured questionnaires; various institutions were visited to have the interviews of key person also. With the advent of Information technology, material access is became very easy and accessible to any place.

**1.9  SELECTION OF RESPONDENTS**
In keeping view of scope and limitation of the study, researcher has selected twenty-eight pharmacy college libraries, which are approved by Pharmacy Council of India. According to PCI norms, pharmacy colleges library have been established from the time of inspection of the
college. Researcher has send questionnaire to all twenty-eight pharmacy college librarians of study area by personal visit.

1.10 ORGANIZATION OF STUDY

Looking to the objective of the study the research topic was organized into following eight chapters;

CHAPTER 1: INTRODUCTION

This chapter covers the overview of library system, need and importance of library, introduction to the collection development, advent of computer in library. The role played by the library in the professional courses is well explained in this chapter. Advancement and atomization of library in the modern era is also more effective to the library development and changing the view of conventional library to the E-library. This chapter includes hypothesis of the study. In addition, this chapter involves objective, need, limitation, significance and aim of study. Collection development and management is the important topic in the library development, which is most important and it is discussed here in brief.

CHAPTER 2: LITERATURE REVIEW

Literature review is the search of the study which has been done by the scholar and the researchers till now. The aim of the writing of this chapter is to inform the users about the research topic that how much work has been done on this topic till now and what are the shortcomings in this research. The literature review is the chapter which will decide the aim of your study (e.g., your research objective, the problem or the topic which you have to cover in your research). Literature is not only the material that is available to you in form of hard or soft copy. Literature review indicated how many materials available in your research subject area in short of time within the area of your study. A literature review discusses published information in a particular subject area, and sometimes information in a particular subject area within a certain period. A literature review can be just a simple summary of the sources, but it usually has an organizational pattern and combines both summary and synthesis. A summary is a recap of the important information of the source, but a synthesis is a re-organization, or a reshuffling, of that information. It might give a new interpretation of old material or combine new with old interpretations. On the other hand, it might trace the intellectual progression of the field.
including major debates. In addition, depending on the situation, the literature review may evaluate the sources and advise the reader on the most pertinent or relevant. Function, importance, need and objective of the review literature have been discussed here in this chapter.

For our convenience, the literature has been discussed and reviewed from the following resources.
1. Theses /Dissertations
2. Books
3. Articles/Conference proceeding

CHAPTER 3: HISTORY OF PHARMACY

This chapter involves the history and development of the pharmacy field in India. It involves advent of pharmacy in India from the diploma studies to the postdoctoral studies, which also includes the numbers of certificate course started in the postgraduate diploma. This involve the starting of one and half year pharmacy programme to the two year and again back shift to original programme. In addition, this chapter involves the starting of choice based credit system in pharmacy. This chapter discusses the establishment, development and growth of the historical institutes founded in the Indian pharmacy history. International scenario in pharmacy and modern trend and course involve in this field is discussed in brief here. It also includes the starting pharmaceutical industrialization in India and especially in Gujarat. It discusses the growth of pharma field sharing in the world. The globalization has good impact on the current development of the pharma field.

CHAPTER 4: PHARMACY COLLEGES: AN INTRODUCTION

This chapter involves the introduction of the pharmacy colleges involved in this study. This involves the establishment year, affiliation, contact detail, and library collection information. The present study is on pharmacy college libraries of the north and some part of central Gujarat, which is restricted to Ahmedabad and Gandhinagar district, which are government or self-financed. The study is restricted to the libraries of 28 pharmacy colleges which were established until date. In case of colleges, data has been collected from the listed pharmacy
college library. All the self-financed colleges that have been included in the study have been established during last few years and their libraries are still at infancy stage.

CHAPTER 5: COLLECTION DEVELOPMENT AND MANAGEMENT

Collection development is the process of planning and acquiring a balanced collection of library materials of many formats including books, periodicals, online resources and other media. In addition to on-going materials acquisition, library collection development includes:

- Replacement of the lost materials
- Weeding of the unnecessary materials
- Planning for acquiring future library materials
- Cooperation with library and its staff.
- Establishing standard policy for material selection

The collection development and management includes sources and classification of material, which include both documentary and non-documentary sources. Internal and external factors affecting the collection development were discussed in this study. Functions, objective, role, relation, and ethics of collection development and management discussed in brief. In addition, the document selection procedure with technical aspects was elaborated in well manner. Policy of collection development and management with advantage and disadvantage were discussed here deeply. Starting from the selection and procedure of material to the procurement and accessing were listed in the prescribed manner, which is well understood. The evaluation parameters of the collection development were also discussed here. The most important function of the library, management, circulation and policy were briefly involved in this chapter.

CHAPTER 6: LIBRARY AUTOMATION

This chapter covers the important aspects related to computerization process of library automation. This chapter covers introduction about computerization, IT and Library, types of library computerization and covers the computerized services provided by library in academic organizations.
Nowadays, the purpose behind automation is to make procedure of particular activity more accurate and less time consuming which ultimately saves the valuable resources. Another major purpose behind automation is to save labour and human efforts. Other purpose can be:

1. To provide quality products and services.
2. To increase the quantity at least cost.
3. To make the human life more comfortable.
4. To reduce the workload.

This can perhaps be achieved by increasing the internal efficiency of the functions of a library becomes most relevant and desirable.

1. Supporting the mission of the institution;
2. Reducing costs and achieving efficiencies;
3. Improving the system of acquiring, retrieval and dissemination and
4. Educating and training both staff clientele for the automated environment.

Thus, the main purpose of library automation is to achieve the preordained goal of the institution by providing efficient but less expensive service services and by educating the staff and the users for the changed new environment.

CHAPTER 7: ANALYSIS OF COLLECTED DATA

In this chapter, main purpose is to study the library collection development and management in the library of pharmacy colleges. The study also focuses application of computerization. Computerization is made as a part of overall improvement in the library services, and to understand the pace of accepting the emerging IT particular Internet in the college libraries. The method of implementation of the collection of study material like books, journals, dissertations, project theses, CD ROM, DVD, E-resources etc, which is collected from various sources. Analysed data of structured questionnaire framed for this purpose was distributed to all the 28 pharmacy colleges in the state. A mock test was performed to check the suitability of the questionnaires. In any scientific research, the collection of data and its analysis appear to be very significant because the entire gamut of research depends on the data, type and its analysis to determine the results appropriate for the study. Data obtained through the
questionnaire are analysed and interpreted in the succeeding table. The Statistical Package for the Social Science (SPSS) and MS-Excel were used to feed and tabulate the data.

CHAPTER 8: CONCLUSION AND SUGGESTIONS

Academic libraries in pharmacy colleges of Gujarat have been largely affected by constraints where resource acquisition has been decreased. This situation has led to serious thinking on the capabilities to compensate for reduced budget. There is a need to have advance computerization of pharmacy college libraries, which will show the new concept for the sharing between the libraries. Improved collection and development system will ultimately improve the reference and reading material, which will increase the knowledge depth of the students and researchers. The recent technological advances have been helped to access published information. Apart from this there is valuable information unpublished, and it needs to be tapped. Library atomization and computerization is one of the tool kits for libraries to survive in the present circumstance. The goal of academic library is to fulfil the teaching, learning, scholarly and research need of the users. Based on the result of analysis and finding of data, the conclusion was drawn.