CHAPTER 1
AN OVERVIEW OF THE STUDY

1.1 Introduction

There has been an increasing recognition of abilities of persons with disabilities and emphasis on mainstreaming them in the society on the basis of their capabilities. The Government of India has enacted three legislations for persons with disabilities viz. (i) Persons with Disability (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, which provides for education, employment, creation of barrier free environment, social security, etc. (ii) National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disability Act, 1999 has provisions for legal guardianship of the four categories and creation of enabling environment for as much independent living as possible. (iii) Rehabilitation Council of India Act, 1992 deals with the development of manpower for providing rehabilitation services (MSJE 2009). It is already established that access to information is one of the most important human rights which allows the individual to develop himself/herself and participate actively within a democratic society, fully exercising his/her rights and duties (Todaro 2005, p.253). A badly informed community or one that restricts information to an elite group, in the long term becomes a non-democratic society in which ignorance and inequality of opportunities will unfailingly lead to intolerance and discrimination among citizens (Todaro 2005, p.254). All citizens should therefore have access to information that will enable them to be active and equal contributors and participants in society.

Individuals with disabilities are part of every demographic group imaginable. Thus, regardless of library type or location, individuals with disabilities represent an identifiable component of the constituency a library serves (Chalfen and Farb 1996, p. 51). “The accessibility of your library will not be judged by the sophistication of the technologies you have, but by the comprehensiveness of the services you offer” (Cantor 1996, p.45). In this regard, the present study aims at analyzing the role of the libraries in information storage and access in the digital environment for the people with disabilities in NCR region.
1.2 Statement of the Problem

The problem of disability is gaining more and more importance all over the world. The planners of India very well understand the significance of the problem and therefore various policies and programs are framed by the government for the people with disabilities in India. Various sample surveys and studies are done by the NSSO (National Sample Survey Organization) and Census of India to determine the status of the disabled population in India which includes the studies dealing with the analyses of various dimensions of disability and definitional aspects of disability in India. According to the Census 2001, there are 2.19 crore persons with disabilities in India who constitute 2.13 percent of the total population. This includes persons with visual, hearing, speech, locomotor and mental disabilities. As per Census 2001, out of the total population of 13,850,507 people in Delhi, there are 2,35,886 people who comes under disabled population (MSJE 2009).

The study entitled “Disability Status: Case Study of Delhi Metropolitan Region” undertaken by Dr. Bupinder Zutshi, examines the conceptual and theoretical aspects of disability sector in India with a special focus on magnitude, prevalence rates, incidence rates, characteristics and composition of disabled person in India. Special focus has been given to identify available services and facilities for disabled persons through government and non-government organizations with special reference to Delhi Metropolitan region. It was decided to undertake the research topic ‘A Study of Information Storage and Access in Digital Environment for the People with Disabilities in NCR Libraries’ as there are no previous studies reporting on the extent to which NCR libraries and institutions holding them are able to meet the disabled users information needs and demands with the help of Library and Information Services, Assistive Technology and ICT facilities. Therefore, the present study is mainly focused on the study of the access and use of electronic resources by the people with disabilities in the NCR libraries and primarily on the services and facilities (like ICT, AT etc.) available in the institutions/libraries for the access of information by the users in the digital environment.
1.3 Objectives of the Study

The various objectives of the study are as follows:

1) To identify the varied information needs and requirements of the people with disabilities.
2) To study the type of collection available in the institutions/libraries for the people with disabilities.
3) To know the various services and assistance provided by the institutions/libraries and by the staff.
4) To find the barriers traditionally faced by people with disabilities in accessing library’s collection, material and services.
5) To determine the effectiveness of Internet-based services for the people with disabilities.
6) To identify the provision of training and orientation programmes for the library users as well as staff.
7) To examine the software and hardware (i.e. AT) facilities available in the institutions/libraries for the people with disabilities.
8) To know the Standards followed for providing the services and facilities to the people with disabilities.
9) To study the status of Research and Development activities for the people with disabilities.
10) To study the web accessibility for the people with disabilities.

1.4 Hypotheses

1) Electronic Resources Serve the Best Source of Information to the People with Disabilities.
2) Orientation and Training Programmes for the Users lead to the Increased and Effective Use of the Institution/Library Resources.
3) ICT has a Positive Influence on the Level of Independence of People with Disabilities.
4) Sufficient Software and Hardware Facilities are Available in the Institutions/Libraries for the People with Disabilities.
1.5 Scope of the Study

The scope of the research work is having certain limitations regarding the location, type of the users and the survey population of the study. The study is limited to National Capital Region only and the type of the users selected for the study includes blind/vision impaired users, deaf/hearing impaired users and locomotor impaired users only among the people with disabilities. The people with mental retardation or mental illness are not included in the study. The survey population in each library is 25 only which is taken on the basis of availability of the users during the time of the survey.

In this study the term ‘People with Disabilities’ has been used for the people who are blind/vision impaired (i.e. total absence of sight/person with impairment of visual functioning even after treatment or standard refractive correction but who uses or is potentially capable of using vision for the planning or execution of a task with appropriate assistive device), deaf/hearing impaired (i.e. complete hearing loss/loss of sixty decibels or more in the better ear in the conversational range of frequencies) and people suffering from locomotor disability (i.e. disability of the bones, joints or muscles leading to substantial restriction of the movement of the limbs). The type of organizations selected for the study includes the major institutions/libraries serving the people with disabilities in NCR region. The selection of the institutions/libraries was done on the basis of certain criteria which include: Type of collection and services available, Type of ICT infrastructure and facilities available and Type of the user community served by the institutions/libraries, etc. The total number of 15 institutions/libraries are selected for the research study i.e. 5 institutions/libraries each serving the blind/vision impaired, deaf/hearing impaired and locomotor impaired users. The list of the institutions/libraries selected for the research study includes:

1) Amba Dalmia Resource Centre (ADRC), Miranda House
2) Durgabai Deshmukh College Library (DDCL), Blind Relief Association
3) Braille Library (BL), University of Delhi
4) Hellen Keller Unit (HKU), Jawaharlal Nehru University
5) Ram Nath Batra Talking Book Library (RNBTL), National Association of the Blind
6) All India Federation of the Deaf (AIFD)
1.6 **Research Methodology**

In the present study, an exhaustive literature search has been done to collect the relevant material on the area under study for preparing the review of related literature in detail to cover the various aspects as per the need of the study. Information was collected from the Internet and from various databases which are accessible through DU Intranet (i.e. Ebsco-host, Elsevier, Science direct, Emerald etc.) and portals (like ACM portal). The Research articles were explored, searched and collected from various National/International journals (Print/Online) by searching from LISA and LISTA from Central Library (University of Delhi) and National Science Library (NISCAIR). The ‘Review of related studies’ has been prepared which contains the following review headings:

- Disability Divide in Digital Age
- Information Resources for the Disabled in Digital Era
- Role of Libraries in Information Storage and Access
- Training Programmes on Disability
- Assistive Technology for the Disabled
- Web Access for the People with Disabilities
The Descriptive survey was done to determine the varied information needs and requirements, type of collection, services and sufficient assistive technology facilities available in the libraries for the blind/vision impaired, deaf/hearing impaired and locomotor impaired users. The accessibility and availability issues regarding the Information were discussed with the experts, teachers and disabled individuals and the questions proposed by them were included in the questionnaires prepared for the research study. The help of ‘Sign Language Interpreters’ was taken to communicate with the deaf/hearing impaired users. The total six sets of likert-type questionnaires were prepared, out of which three set of questionnaires were prepared for the three different groups of the users (i.e. blind/vision impaired, deaf/hearing impaired and locomotor impaired) and the other three set of questionnaires were prepared for the type of institutions/libraries serving the users on the basis of their disability.

The total number of users surveyed is based on random selection and categorized as Faculty members, Research Scholars, Post Graduate students, Graduate students, Senior Secondary/Higher Secondary and Primary school students from various leading institutions/libraries throughout the NCR region. Interviews with the users with disabilities were also done to get the conceptual clarity about the various issues related to disability and barriers faced by them during the access of information in the digital environment. The data collected from the users was organized into the following six categories:

- **Category 1:** User’s Preferences in Electronic Environment
- **Category 2:** Assistance Received in Electronic Environment
- **Category 3:** Use of Information Services
- **Category 4:** Use of Assistive Technology
- **Category 5:** Use of ICT Technology
- **Category 6:** Use of Web Services

The data collected from the institutions/libraries serving the people with disabilities is also organized into six broader categories which are as follows:
- **Category 1:** Electronic Resources for the Users with Disabilities
- **Category 2:** Information Services for the Users with Disabilities
- **Category 3:** ICT Facilities for the Users with Disabilities
- **Category 4:** Accommodations for the Users with Disabilities
- **Category 5:** AT Facilities for the Users with Disabilities
- **Category 6:** Web Services for the Users with Disabilities

The survey results were tabulated and analyzed with descriptive statistics methods using Excel software and ‘Stata version 11’ (i.e. for Hypotheses Testing). Descriptive statistics and inferential statistics methods like Pearson Chi-square test and Fisher’s exact test were used to test the hypotheses. The bibliography is prepared using ‘Harvard Citation Style’ of referencing at the end of all the chapters.

1.7 **Organization of the Study**

The present study is organized into the following Chapters:

**Chapter 1:** An Overview of the Study
**Chapter 2:** Review of Related Studies
**Chapter 3:** Profile of the Institutions/Libraries
**Chapter 4:** Library and Information Storage and Services for the People with Disabilities
**Chapter 5:** Access and Use of Electronic Information by People with Disabilities
**Chapter 6:** Chi-square Testing, Users’ Impact and Cluster Representation of Libraries
**Chapter 7:** Findings, Conclusions and Suggestions for Further Research

Bibliography

Appendices
References


