

## Library Facilities and Services to Users with Disabilities at Jawaharlal Nehru University: A Pilot Study

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### Abstract

A large number of disabled students are studying in various educational institutions of India. Some educational institutions have been observed to provide disabled users with adequate access to library facilities. The majority of them, however, do not have this capacity. This research, as part of a project entitled "Access to libraries for persons with disabilities: An investigation into library facilities and services in India," funded by the ICSSR under the IMPRESS scheme, aims to assess the library facilities (physical access to library building, access to library material and services, and assistive technologies) for disabled users at Jawaharlal Nehru University (JNU). A questionnaire was designed to collect both qualitative and quantitative data. The investigator also observed the availability of facilities and services at JNU. Nearly enough facilities are available on the library campus and within the main library building. The circulation and reference desks are challenging to reach because they were located at a high altitude. The JNU library supports disabled researchers and students with specialized services and assistive technologies. Braille, large print, audio, and electronic books are among the options accessible for the study materials. With bookshare.org, the library provides relevant collections in multiple formats such as daisy mp3, and e-text to visually challenged users.

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**Keywords:** Users with disabilities, Access to library buildings, Access to library material and services, Assistive technologies, Jawaharlal Nehru University, The Helen Keller Library.

### 1. Introduction

Disability is defined in the Rights of Persons with Disabilities Act 2016 as "a person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others". Rights of Persons with Disabilities Act, 2016 prohibits discrimination concerning disabled persons in India from various forms of discrimination and ensures their access to education, employment opportunities, and enhances their societal participation. In 2006, the government of India created a national policy for people with disabilities. The National Policy recognized that people with disabilities are a valuable human resource for the country and aims to build an environment that gives them equal opportunity, protects their rights, and allows them to participate fully in society. Aside from the numerous priority areas, the policy document specified that all buildings, approaches, bathrooms, playgrounds, labs, libraries, and other public spaces should be barrier-free and accessible to people with all types of disabilities. Educational toys, Braille/talking books, relevant software, and other teaching/learning aids

should be available. Expanding facilities for general libraries, e-libraries, Braille libraries, talking book libraries, and resource rooms should be prioritized (Ministry of Social Justice and Empowerment, Government of India, 2006).

According to estimates, around 26.8 million people in India's 1210 million are disabled, accounting for 2.21 percent of the entire population, including visual, hearing, speech, locomotor, and mental disabilities. Forty-five percent of the disabled population is illiterate. 13 percent of the disabled population has completed secondary education but does not have a degree. In comparison, 5 percent have completed high school and have a graduate degree. Around 8.5 percent of the disabled literates are graduates (Social Statistics Division, MoSPI, India, 2016).

Libraries play an essential role in providing citizens with access to knowledge, information, and education. People with disabilities cannot obtain books at traditional bookstores due to a range of obstacles, such as a lack of physical access to stores and a shortage of books in accessible formats such as Braille. Persons with Disabilities have varying degrees of difficulty accessing libraries and the materials available in libraries, depending on their impairment. They are unable to enter libraries since the buildings themselves are inaccessible. Because the reading materials at libraries are not available in convenient formats, people who are blind or have low vision cannot use them. UNESCO and the International Federation of Library Associations (IFLA) have set guidelines for providing equitable access to library facilities and services to all people, including those with disabilities. The Indian government and the UGC have both issued guidelines in this regard. However, in India, only about 0.5 percent of books are available in accessible formats for blind or have low vision (The Centre for Internet & Society, 2013). Therefore, libraries in India must be inclusive of becoming accessible by the person with disabilities. One of the core objectives of librarianship is equal access to recorded knowledge and information. It is essential to make sure that everyone in the community has equitable access to materials. As a result, to provide equitable opportunities for those with disabilities, the physical condition of library buildings, facilities, collections, and services must be examined from the perspective of various user groups.

Jawaharlal Nehru University (JNU) is one of India's most prestigious universities (graded A by NAAC). Since its establishment in 1966, it has demonstrated its superiority in a variety of fields. For those with disabilities, JNU is committed to making all of its programs and services fully accessible. The provision of web services that are accessible to people with disabilities is a part of this goal. The university is implementing the Higher Education for Persons with Special Needs (HEPSN) Scheme in response to UGC recommendations to raise awareness among higher education functionaries about the specific educational needs of people with disabilities (Jawaharlal Nehru University, 2021). The primary purpose of this study is to assess the facilities, collections, and library services available for users with disabilities in the libraries of JNU. Central Library of JNU delivers special services to the university's visually challenged students and researchers using advanced assistive technologies.

## **2. Review of Literature**

This review aims to discover some existing literature on library facilities and services for users with disabilities. In a study, McCaskill and Goulding (2001) found that physical mobility has played a significant role in inspiring disabled students to visit libraries. Koulkourdi (2008) underlined that the education system seldom offers alternative access

points and facilities for disabled students, particularly the tertiary system. Students with disabilities are accepted to university under 'special criteria,' during which their disability degree is assessed. Such departments then notify the library of new intakes of students and their details so that the necessary changes and facilitation may start. Saumure and Given (2002) discovered that reference strategies designed for sighted students were insufficient to cater to the needs of students with visual impairment. They further pointed out that a lack of understanding is another reason disabled students stressed that not everyone is as helpful as those who regularly facilitate information access. People mostly unwittingly hinder access by not understanding visually impaired students' needs. Green (2020) reviewed the literature to illustrate what is being done in public and university libraries to meet the information needs of mentally disabled people or people with some mental health problem. Based on an analysis of existing literature, the research recommended ways to improve service to and advocate for the information needs of these invisibly disabled persons. In addition, even with limitations such as low budget or inadequate staffing, librarians or information professionals may improve their institution's service to people with mental illness. The lack of literature on what academic libraries are doing to support people with mental illness appears to be disappointing as there have been few publications on this subject. Kavanagh (1994) identified that very few resources are available directly to students with learning disabilities or physically disabled who cannot carry books. Many libraries have limited collections of audio, large print books, and CNIB-generated books on a tape produced commercially. Bashir, Fatima, Malik, Younus, and Ali (2017) conducted a study to identify the library resources available for persons with special needs in the libraries of public and private sector universities of Lahore, Punjab province. The study evaluated building access and environment, library staff, library services, and adaptive technology by using 'Adaptation in Library Resources Questionnaire' as an instrument. The study findings showed that although ramps and elevators were available in most libraries, directional signs in large print, book call numbers converted into Braille for blind students, and telecommunication devices were in place in most libraries.

A plenty of works have been published on access to and library services for persons with disabilities. Still, the available published works, particularly in India, are comparatively significantly less in number. According to Saran, White, and Kuper (2020) theory of Evidence and Gap Mapping (EGM) in Low-and Middle-Income Countries (LMICs) like India could be beneficial for persons with disabilities by improving the policy and programme in health, social welfare, and educational sectors (including library services). The initiative can empower their knowledge base, and it will be a successful step towards the dream of sustainable development goals.

In their article, Roy and Bandyopadhyay (2009) focused on users with disabilities providing an environment where they do not have to face any problems or any obstacles or difficulties in the academic libraries of India. A study by Solanki and Mandaliya (2016) focussed on the current scenario of the accessibility of library services to users with disabilities in university libraries in Indian. The results showed that the services offered to users with disabilities are not adequate. Chandrakanth and Reddy (2019) evaluated the facilities available for disabled users in 21 university libraries of Karnataka using three parameters: (1) Access to resources, (2) Physical access to library building, and (3) Services and communications. The study found that some of the University Libraries in Karnataka have taken steps to provide suitable exclusive alternatives to visit the library and avail the services on par with abled users. Some Libraries also found that physical access in parking slots, un-obstructed pedestrian routes, accessibility of circulation desks, accessible furniture, toilet, etc., has been provided.

Concerning services and communications, the most provided service was sensitizing training for the staff and information booklet, followed by postal services. In terms of access to resources, alternative format service is the most popular service, followed by accessible Library websites and Digital libraries.

Datta, Halder, Talukdar and Aspland (2019) tried to identify the problems and enablers faced by disabled university students of India and Australia to access information and determine the strategies to overcome those constraints. They have gone through several policies, reports, and literature related to disability study and adopted a qualitative methodology (semi-structured open-ended interview) based on the thoughts and experiences of the participants. Their research has observed that in the Indian context, most university libraries do not have proper disability services. For example, very few universities have Braille support systems, and those have also been troubled with the limitations regarding availability and accessibility.

Pradhan and Sahu (2019) investigated the availability of services for visually challenged students of eleven secondary and higher secondary in the Medinipur division. The study findings showed that due to improper assistance from the Government level (both central and state), these schools suffer from a shortage of funds. Also, a lack of teaching faculty in these institutes is one of the major hindrances in the overall development of visually challenged students. There was an acute shortage of trained librarians to run the library. Visually challenged students of only five schools, out of the 11, were satisfied with at least one library service. Verma and Arora (2016) presented the activities of the National Institute for the Visually Handicapped, Dehradun, India, to make the visually impaired self-sufficient and recognize the role played by the Institute in disseminating information. The National Library for the print handicapped was established in 1963. The National Talking Book Library was carved out in 1990, and the country's first Online Braille Library was launched on 4 January 2012. The library holds 15,000 Braille books and a set of 18,000 print books in its collection and contains a large group of audio cassettes and CDs (30,000 audio cassettes and 1,700 CDs). After a minimum registration fee payment, the registered users take advantage of the home delivery service for all the information resources. Dodamani and Gedam (2017) examined the services and collections accessible through Sugamya Pustakalaya: An Online Library for the Visually Challenged in India. Sugamya Pustakalaya is a collaborative effort of TCS, Daisy Forum of India and NIEPVD (National Institute for Empowerment of Persons with Visual Disabilities), and the Government of India to end the book famine faced by people with print disabilities. It is the first online library dedicated exclusively to people with print disabilities in India. Users can access a collection of over 3,28,900 books, maintain their unique reading shelves online, and download books in chosen formats. The library has partnered with international agencies to provide accessible e-books for people with print disabilities.

Yadav and Arora (2019) examined the library services provided by the National Institute for the Empowerment of Persons with Intellectual Disabilities (NIEPID) for Divyang users. They observed that NIEPID keeps abreast of the latest developments and techniques about care, training, and rehabilitation of persons with mental retardation by collecting, sifting, assimilating, and disseminating the tailor-made information to its users, from a substantial collection in the field of mental retardation and allied areas. However, they recommended that a strong step is needed to provide barrier-free environments and equal status to everyone for accessing the information and make valid the meaning of the word users by including all users in one unit. Sanaman and Kumar (2014) examined the availability of various Assistive Technology facilities for people with disabilities in the libraries at the National Capital

Region in India. The study findings depicted a lack of Assistive Technology facilities in libraries surveyed. Further, the study concluded that a negligible number of Assistive Technology facilities for the deaf/hearing impaired and locomotor impaired users are in India's National Capital Region libraries.

Sutar (2017) suggested several ICT-based library services for visually impaired students. He has proposed a set of required ICT infrastructures like Screen Reading Software, Job Access with Speech (JAWS), Non-Visual Desktop Access (NVDA), VoiceOver, BRELTTY, ORCA, Web Anywhere, Spoken Web, etc. by defining the need for library services to the visually impaired students. His paper further provided a brief account of The Persons with Disabilities Equal Opportunities, Protection of Rights and Full Participation Act, 1995, Recommendations of National Knowledge Commission, Sugamya Pustakalaya, and the role of several institutions providing library services to visually impaired students (Mitra Jyothi, National Association for the Blinds, National Library Service for the Blind and Physically Handicapped). Dodamani and Dodamani (2019) attempted to understand the provisions and challenges of adopting assistive technologies for visually impaired students in university libraries of India. A Survey of 185 randomly selected university libraries was conducted based on a structured set of questionnaires followed by a brief literature review. As per their analysis, only 20.70% of libraries have Braille books, and 2.70% have audiobooks in their collection. Though all the universities have necessary IT support in their libraries, the scenario is not promising concerning adopting assistive technologies. Only 22.70% of university libraries have screen magnification software, screen-reading software, SARA, OCR Scanner, etc., and other technologies like Daisy Book Reader, Braille Embosser, Digital Voice Recorder, Large Print Keyboard is more miniature. The analysis also showed that among these universities, 25.94% had a disabled-friendly library website, 22.70% had Accessible E-resources, 22.16% had private study rooms, and only 0.54% had tactile pathways for the visually impaired students. Khowaja and Fatima (2019) investigated the availability of knowledge resources for visually impaired persons in the libraries of central universities in India. The study found that libraries of most of the universities surveyed are providing primary resources to their visually impaired users. Libraries mostly have Braille Books, Audio Books, Talking Books, Talking Newspapers, Braille Magazines, and some assistive equipment and software. Further, they recommended librarians enhance assistive technologies as they are necessary for visually impaired users to access information in an accessible format.

Several studies were conducted in India and abroad that assess the access to library services for users with disabilities. However, no study has been shown to evaluate the library services to persons with disabilities in JNU. Therefore, this study attempts to assess the facilities, collections, and services available for users with disabilities in academic libraries in JNU.

### **3. Objectives**

The study's overall goal was to assess the access to library facilities and services for disabled users. The specific objectives are to:

- assess the physical access to the library buildings and facilities at JNU;
- identify the access to the study material available and services offered to users with disabilities at JNU, and
- highlight of availability of assistive technologies at JNU library.

#### **4. Methodology**

This research is part of a project entitled "Access to libraries for persons with disabilities: An investigation into library facilities and services in India" funded by the ICSSR under the IMPRESS scheme. Through a questionnaire, the study collected both qualitative and quantitative data. Based on a review of relevant literature, a questionnaire with 19 questions was designed. Using an IFLA-developed checklist, the investigator also observed the availability of facilities and services and evaluated the degree of accessibility to buildings, materials, and services (Irvall & Nielsen, 2005).

#### **5. Findings**

JNU's Dr. B R Ambedkar Central Library has a documented policy that outlines the services provided to users with disabilities. Currently, 100 registered users in JNU represent three major categories of disabilities: (i) visually impaired (person who has lost complete sight in both near and far vision), (ii) partially visually impaired (person with partial sight in one or both eyes or visual acuity worse than 6/12–6/18), and (iii) physically disabled (persons with locomotor and auditory disability). The librarian confirmed that the number of users with disabilities using the library has increased in the last five years.

- ***Physical access to library building***

Physical accessibility of libraries to all users is necessary for smooth access to library services, and library services should be suitably adapted to meet their different requirements. A visit to the JNU library, a response from the librarian in charge of the disabled unit, and investigators' observations using the IFLA checklist revealed that, while JNU has a dedicated library for disabled people, there is no adequate funding for continuing to develop collections and facilities for them. The library, however, receives funds from Equal Opportunity Office (EOO) in response to a request for smooth services for people with disabilities.

The facilities on the library campus and inside the main library building are almost sufficient, with clear Signs/Symbols for disabled users at the entrance of the library. There are ramps with railings at the library's main gate, and there is a proper passage to the entrance with smooth and non-slippery ramps. However, parking is not readily available near the library's entrance. The library has clear, easy-to-understand signs but no pictograms. Tables of various heights are available in the library for physically challenged users. The library has visible and audible fire alarms, and the service desk is close to the entrance, but the investigators noticed that the shelves were probably out of reach. There is enough spacing between doorways for wheelchairs, and there are reachable Braille buttons/signs inside the elevators. Ramps, wheelchairs, and talking elevators are available for physically and visually challenged users. The toilet/washroom facilities in the library building were also remarkably adequate.

The library includes wide doors for easy entry and relatively spacious toilets, with door handles and flushing levers easy reach and washbasins/mirrors at adequate heights for anyone to access. The library, on the other hand, lacked sufficient signs indicating the location of toilets/washrooms. The circulation and reference desks were a little high and challenging to reach. The library featured appropriate chairs for users to sit on to wait, but there was no proper queue system for book circulation.

- ***Access to library material and services***

One of the research objectives was to look into the accessibility of library materials for students with disabilities in various formats. The JNU library, according to information gathered from the librarian, provides study materials in alternative formats such as Braille, large print, audio, and electronic books. The JNU library has recorders, CDs, talking and audiobooks, Braille printers, scanners, and ear-buds for impaired users. The library has subscribed to bookshare.org to assist visually impaired students by providing relevant collections in various forms such as daisy, mp3, and e-text. Additionally, the library is also a member of the Daisy Forum of India (DFI). The following services and facilities are offered to students with disabilities in JNU:

- Visually impaired students are given a laptop and a voice recorder.
- Each student has also been given an Angle Daisy Player (Digital Voice Recorder) to record their classroom lessons.
- M.Phil. and Ph.D. researchers have received Dell laptops from the library.
- The Central Library provides wheelchairs to Physically Challenged students with the support of EOO.
- The library has extended locker facilities for M. Phil. and Ph.D. scholars who are visually impaired.
- Five computers are reserved on the ground floor of the library for the physically challenged students.
- JNU Library does not provide adequate special services such as home delivery, Drop box, or Email/SMS services. At the library, however, amenities such as adjustable furniture and drinking water within reach were offered. For the benefit of these students, the library organizes a training and orientation programme on the use of assistive technology to use the most up-to-date assistive technologies in their daily studies.

- ***Adaptive equipment or technologies for persons with disabilities***

Services for disabled users are provided by a dedicated unit named after Helen Keller in the JNU library. The Helen Keller Unit provides specialized services and assistive technologies to visually impaired researchers and students. It has 30 computers with JAWS (screen reading software), MAGic (screen magnification software), Kurzweil 1000 (OCR software), and computer headphones installed on each computer. The library also has Twenty HP flatbed scanners, two Lexcam scanners, two refreshable braille displays, two braille embossers, and two digital voice recorders. This unit's computers also have Duxbury Braille Translators (DBL) software installed, which supports various European and Hindi languages. By converting print or electronic text to speech, these assistive devices (hardware and software) help visually impaired/partially sighted students with reading, writing, and learning.

## **6. Suggestions for further improvement**

In light of the study's findings, the library should:

1. collects proper feedback from the users with disabilities to identify their requirements and potential use of special services to establish priorities for implementing improved services;
2. follow the guidelines designed by IFLA and UNESCO regarding access to library services for users with disabilities;

3. offer users with disabilities Drop box facility, home delivery and SMS/email services;
4. provide essential staff training to improve services for users with disabilities in terms of knowledge, experience, and responsibility to provide practical support in conjunction with domain experts from disability-related national institutions;
5. allocate special funds for new assistive technologies and developing collections in convenient formats; and
6. initiate a cooperation with publishers or other libraries to improve library resources and services for users with disabilities.

## **7. Conclusion**

It is discovered that while JNU Library has a commitment to ensuring facilities and resources for its disabled users, it falls short in some areas. The JNU library, with its 100 registered users, has a documented policy that outlines the services provided to users with disabilities. That is why number of users with disabilities using the library has increased in the last five years. Although there is no adequate funding for developing collections and facilities for users with disabilities, the library receives funds from EOO in response to a request for smooth services for them. The facilities on the library campus and inside the main library building are almost sufficient. The library, on the other hand, lacked sufficient signs indicating the location of toilets/washrooms. The circulation and reference desks were a little high and challenging to reach. The library featured appropriate chairs for users to wait, but there is no proper queue system for book circulation. The JNU library, with a separate Unit called Helen Keller, provides specialized services with assistive technologies to disabled researchers and students. The library is equipped with advanced assistive devices, including hardware and software. The library provides study materials in alternative formats such as Braille, large print, audio, and electronic books, and subscribing to bookshare.org to assist visually impaired students by providing relevant collections in various forms such as daisy, mp3, and e-text. Due to the fact that this study is limited to JNU, its findings may not be applicable across all academic libraries in India. Consequently, it is recommended that further research be conducted on the facilities and services available for users with disabilities in all Indian academic libraries.

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