

**NEED, AWARENESS AND USE OF COLLECTION AND SERVICES IN LIBRARIES OF NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION & RESEARCH IN INDIA: A STUDY**

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# ABSTRACT

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## INTRODUCTION

Libraries play a crucial role in providing access to information and resources to the community they serve. Whether it's a public library, academic library, or special library, they all have a common goal of supporting education, research, and personal enrichment. In this introduction, we will explore the fundamental aspects of library collection and services. The wide range of collection materials and services available in libraries. Libraries continue to evolve to meet the changing needs of their communities, embracing new technologies and expanding their offerings to ensure equitable access to information for all.

**Library Collection:** The library collection refers to the materials and resources available for use by library patrons. Traditionally, libraries have been associated with physical books, but modern libraries offer a wide range of materials in various formats.

Here are some key components of a library collection:

1. **Books:** Libraries have a vast collection of books covering various subjects and genres. They may include fiction, non-fiction, reference books, textbooks, and children's books.
2. **Periodicals:** Libraries often subscribe to newspapers, magazines, and scholarly journals. These publications provide up-to-date information on current events, research, and other topics of interest.
3. **Audiovisual Materials:** Libraries may offer audio CDs, DVDs, Blu-rays, and streaming services that provide access to music, movies, documentaries, and educational content.

4. **Digital Resources:** Many libraries now provide access to e-books, e-journals, online databases, and digital archives. These resources can be accessed remotely, expanding the library's reach beyond its physical location.
5. **Special Collections:** Some libraries house special collections that focus on specific subjects, rare books, manuscripts, archives, or historical materials. These collections often require special handling and may have restricted access.

**Library Services:** Libraries offer a wide range of services to meet the diverse needs of their users. Here are some common library services:

1. **Circulation Services:** This involves checking out and returning library materials. Patrons can borrow books, DVDs, and other items for a specific period. Libraries typically have systems in place to track borrowed items and manage due dates.
2. **Reference Services:** Librarians provide assistance in finding information, conducting research, and answering questions. They can help users navigate library resources, search databases, and locate relevant materials.
3. **Interlibrary Loan:** If a library doesn't have a particular item in its collection, interlibrary loan services allow patrons to request materials from other libraries. This service expands access to resources beyond what a single library can offer.
4. **Digital Services:** Libraries provide computer workstations, internet access, and Wi-Fi for patrons to use. They may also offer assistance with digital literacy, technology training, and troubleshooting.
5. **Programming and Events:** Libraries host various events such as author talks, book clubs, workshops, and educational programs for people of all ages. These activities foster community engagement and promote lifelong learning.

6. Children and Youth Services: Libraries often have dedicated services for children and teenagers, including storytimes, summer reading programs, homework help, and age-appropriate collections.
7. Specialized Services: Academic libraries may provide services tailored to students and faculty, such as research support, course reserves, and access to academic databases. Special libraries may focus on specific industries or professions, offering specialized resources and services.

## **STATEMENT OF THE PROBLEM**

The study is entitled as “**Need, Awareness and Use of Collection and Services in Libraries of National Institute of Pharmaceutical Education & Research in India: A Study**”. The National Institute of Pharmaceutical Education & Research (NIPER) libraries in India play a vital role in supporting the academic and research activities of students, faculty, and researchers in the field of pharmaceutical sciences. However, despite their significance, there seems to be a gap in understanding the actual needs, awareness, and effective utilization of the collections and services offered by these libraries. This study aims to address this issue by investigating and analyzing the level of awareness and utilization of library resources among the NIPER community. By identifying potential barriers and challenges hindering the optimal use of these resources, the study intends to provide valuable insights to the library management for enhancing their services, improving resource allocation, and tailoring the offerings to better meet the diverse needs of the users. Ultimately, the findings of this research will contribute to the overall enhancement of the library experience and the advancement of academic and research pursuits at NIPER and similar institutions across India.

## **OBJECTIVES OF THE STUDY**

1. To know the different types of collections and services available in NIPERs Library.
2. To compare the services among all NIPERs Library.
3. To study the different types of collections used by the users in the NIPERs Library.
4. To study the purpose and frequency of using the resources available in the NIPERs Library.
5. To find the impediments faced by the users while accessing and using the resources in the library.
6. To study collection and services on the academic work of the users in the NIPERs Library.
7. To identify the number of users knows about open access.

## **HYPOTHESES OF THE STUDY**

1. There is a significant association between the frequency of use of different types of information sources.
2. There is a significant association between the type of information source and the need for information.
3. There is a significant association between the satisfaction level and the type of information source.
4. There is an association between the type of E-resources used and the frequency of use.
5. There is an association between satisfaction level and library services.
6. There is a significant association between awareness levels and open-access resources.

**SCOPE AND LIMITATION OF THE STUDY**

The scope of study includes National Institute of Pharmaceutical Education and Research (NIPERs) Library in India.

**Table 1.1 NIPERs Institute**

<b>S.No.</b>	<b>NIPER</b>	<b>State</b>	<b>Academic Session Started</b>
1	NIPER, Mohali	Punjab	1998
2	NIPER, Ahmedabad	Gujarat	2007
3	NIPER, Hajipur	Bihar	2007
4	NIPER, Hyderabad	Telangana	2007
5	NIPER, Kolkata	West Bengal	2007
6	NIPER, Guwahati	Assam	2008
7	NIPER, Raebareli	Uttar Pradesh	2008

The National Institute of Pharmaceutical Education and Research (NIPER), Ahmedabad, has not granted permission to access or provide the library data for the study. Consequently, I have excluded NIPER Ahmedabad from the research and focused the study on the remaining six NIPER institutes, which are as follows:

**Table 1.2 NIPERs Institute**

<b>S.No.</b>	<b>NIPER</b>	<b>State</b>	<b>Academic Session Started</b>
1	NIPER, Mohali	Punjab	1998
2	NIPER, Hajipur	Bihar	2007
3	NIPER, Hyderabad	Telangana	2007
4	NIPER, Kolkata	West Bengal	2007
5	NIPER, Guwahati	Assam	2008
6	NIPER, Raebareli	Uttar Pradesh	2008

## **RESEARCH METHODOLOGY**

The basic research method adopted for the study was the survey method. As there are many methods used in survey methods to collect data like observation, interview and questionnaire, the present study used questionnaire method to collect data from the NIPERs Institutes. Two comprehensive and structured questionnaires were developed by the researcher in consultation with the research supervisor for the purpose of this study. The first questionnaire was for the librarians of NIPERs Libraries and the second questionnaire was for the library users.

### **Research instruments**

**Questionnaire:** The questionnaire method involves designing a set of structured questions to gather data from users. Participants are provided with written questionnaires, and they are expected to respond by selecting predefined answers or providing written responses.

#### **➤ Measuring Techniques**

In the investigation basically, the questionnaire has been used to gather data. Most of the questions consist of multiple choices where respondents have been asked to tick mark (✓) their answers. In addition, the following techniques have also been used to collect the requisite data.

- Rating and Ranking Scale
- Likert- Five Point Scale

There are several questions in the questionnaire which have openended answers where respondents were asked to give their opinion or suggestions.

### **Sampling**

In this study, I employed a simple random sampling technique to select a representative sample from the larger population under study. This method involved randomly

choosing participants or elements from the entire population, ensuring that each member had an equal chance of being included in the sample. By employing simple random sampling, I aimed to enhance the generalizability of my findings to the broader population, as this method minimizes bias and ensures that each individual or element in the population has an equal opportunity to be part of the study. This approach not only facilitated the collection of reliable data but also contributed to the overall robustness and validity of the research outcomes, strengthening the credibility of the study's conclusions.

### **Sample and Population of the Study**

Total Population=1152

Sample Size=289

Sample Size= 289

(Confidence Level 95%, Margin of Error 5%)

(Source: Calculator.net. (2008). Sample Size Calculator. Retrieved from

<https://www.calculator.net/sample-size-calculator.html>)

Sample Size %= Sample Size\*100/Total Population

=289\*100/1152

=25.08%

**Sample Size%=25.08 %**

Sample Size%=25.08 %

If one Institute's population size=224

Sample Size % =25.08 %

Sample Size = Institute Population Size\* Sample Size% / 100

=224\*25.08/100

=56.17

**Sample Size = 56**

With the help of the above calculation, the sample size of NIPERs has been prepared. Here 25.08 % of the total population of each institute has been taken as a sample of users for the study.

**Table 1.3**

**NIPERs Institute**

<b>S.No</b>	<b>Name of the Institutes</b>	<b>Number of Users</b>	<b>Sample Size</b>
1	NIPER Hyderabad	224	56
2	NIPER Guwahati	150	38
3	NIPER Kolkata	115	29
4	NIPER Mohali	328	82
5	NIPER Raebareli	193	48
6	NIPER Hajipur	142	36
<b>Total</b>		<b>1152</b>	<b>289</b>

**Note:** If the calculated sample size fraction value is greater than or equal to 0.5, then

consider the sample size value as 1.

## **ORGANIZATION OF THE STUDY**

The organization of the present study includes five chapters, subsequently followed by sections comprising the bibliography, and appendices.

### **Chapter 1: Introduction**

This chapter outlines the statement of the problem, and objectives, also highlighting the significance and scope of the study. The chapter also include a brief overview of the research methodology and the organization of subsequent chapters.

### **Chapter 2: Review of Literature**

This chapter presents a comprehensive review of relevant literature and research studies related to the research topic. It provides a comprehensive analysis of relevant theories, concepts, and methodologies.

### **Chapter 3: Profile of National Institute of Pharmaceutical Education and Research**

This chapter provides a brief overview of the National Institute of Pharmaceutical Education and Research India and its Libraries.

### **Chapter 4: Data Analysis and Interpretation**

In this chapter, the focus is on analyzing and interpreting the data collected for the research study. This involves summarizing and presenting the key characteristics of the collected data through the use of tables and figures.

### **Chapter 5: Findings, Conclusion and Suggestions**

The chapter presents the key findings derived from the data analysis and interpretation.

The chapter move on the moves on to draw conclusion based on the research findings.

Finally, the chapter concludes by offering suggestions based on the research findings.

### **MAJOR FINDINGS OF THE STUDY**

#### **➤ Demographic Information of the Respondents:**

1. The majority of respondents across all NIPER Libraries are in the age group "Up to 30 years," comprising 77.85% of the total respondents.

2. The second-largest age group is "31-40 years," accounting for 22.14% of the total respondents.
3. There are no respondents in the age categories "41-50 years" and "Above 50 years" at any of the NIPER Libraries, indicating a lack of representation from older age groups in the survey sample.
4. Age distribution patterns are relatively consistent across all NIPER Libraries, with minor variations in the percentages within each age group.

➤ **Frequency of Visit to the Library**

1. The highest percentage of respondents across all NIPER Libraries visit the library daily (44.62%).
2. Occasional visits are the second most common pattern (22.05%).
3. Approximately 14.87% of respondents visit the library once a week.
4. Around 11.76% of respondents visit the library once a month.
5. The least frequent category is "once in a fortnight" visits, with only 6.67% of respondents falling into this group.
6. Male respondents tend to visit the library more frequently than female respondents in certain categories, but this pattern may vary across different NIPER Libraries.

➤ **Frequency of Use of Different Types of Information Sources:**

1. Books are the most frequently used information source in most NIPER Libraries, ranging from 35.42% to 53.57%.
2. Periodicals are the second most frequently used information source in several NIPER Libraries, with usage percentages ranging from 28.57% to 48.28%.
3. Thesis/Dissertations and Standards/Patents/Specifications are also commonly used sources, but their usage percentages vary across different libraries.

4. CD-ROMs are the least frequently used information source, with usage percentages ranging from 10.42% to 27.59%.

➤ **Satisfaction Level of Library Collection**

1. Reference Materials consistently have the highest satisfaction levels across most NIPER Libraries, ranging from 31.71% to 54.17% satisfaction.
2. Periodicals also receive relatively high satisfaction levels in multiple NIPER Libraries, ranging from 26.83% to 50%.
3. Books, Seminars/Conference Proceedings/Workshops, and Reprints/Maps/Globes tend to have lower satisfaction levels across most NIPER Libraries, ranging from 6.25% to 21.05%.
4. Different NIPER Libraries exhibit distinct patterns in satisfaction levels across information sources, suggesting potential differences in resource availability or user preferences at each location.

➤ **Use of Electronic Collection**

1. E-Books and E-Journals are the most commonly used electronic resources across different NIPER Libraries, with usage percentages varying among the institutes.
2. Usage of CD-ROM Databases is relatively low across all NIPER Libraries.
3. The awareness and use of open access resources also vary among different NIPER Libraries.

➤ **Adequacy of Library Collection**

1. The percentage of respondents who considered the library collection as "adequate" ranges from 10.71% to 33.33%.
2. The highest percentage of respondents who found the library collection "adequate" was at NIPER HAJIPUR (33.33%), followed by NIPER KOLKATA (27.59%).

3. The majority of respondents in all Libraries considered the library collection to be "fair" rather than "adequate" or "inadequate."

➤ **Circulation/ Lending Service for Books**

1. The majority of respondents across all NIPER Libraries utilize the lending service for books, with percentages ranging from 70.83% to 85.71%.
2. NIPER Guwahati has the highest percentage (81.58%) of respondents using the lending service for books.
3. NIPER Raebareli has the lowest percentage (70.83%) of respondents using the lending service for books.

➤ **Circulation/ Lending Service for Periodicals**

1. The usage of lending services for periodicals is slightly lower compared to books, with percentages ranging from 23.68% to 46.43%.
2. NIPER Hyderabad has the highest percentage (46.43%) of respondents using the lending service for periodicals.
3. NIPER Guwahati has the lowest percentage (23.68%) of respondents using the lending service for periodicals.

➤ **Inter Library Loan Service**

1. Varying Usage Rates: The percentage of respondents who used the interlibrary loan service varies across the institutions, ranging from 16.67% to 35.71%.
2. Majority Non-Users: In most institutions, the majority of respondents did not use the interlibrary loan service, with percentages ranging from 64.29% to 83.33%.

➤ **Reference Service**

1. Provision of orientation program: NIPER Hyderabad had the highest percentage of respondents (82.14%) indicating that they receive an orientation program.
2. NIPER Raebareli had the lowest percentage of respondents (54.17%) reporting the provision of an orientation program.
3. Help to use the reference service: NIPER Hajipur had the highest percentage of respondents (77.78%) stating that they receive help in using the reference service.
4. NIPER Guwahati had the lowest percentage of respondents (68.42%) reporting help in using the reference service.
5. Help to use bibliographical sources: NIPER Hajipur had the highest percentage of respondents (69.44%) indicating that they receive help in using bibliographical sources.
6. NIPER Hyderabad had the lowest percentage of respondents (55.26%) reporting help in using bibliographical sources.
7. Help to search the document: NIPER Hajipur had the highest percentage of respondents (83.33%) stating that they receive help in searching for documents.
8. NIPER Raebareli had the lowest percentage of respondents (26.32%) reporting help in searching for documents.
9. Help to search the specific information: NIPER Kolkata had the highest percentage of respondents (93.10%) indicating that they receive help in searching for specific information.
10. NIPER Guwahati had the lowest percentage of respondents (6.90%) reporting help in searching for specific information.

➤ **Staff Behaviour**

1. The staff at NIPER Guwahati received a higher rating for being "Most Helpful" (63.16%) compared to other Libraries.
2. NIPER Hyderabad had a lower percentage of "Most Helpful" ratings (46.43%).
3. The staff at NIPER Hajipur had the highest percentage of "Most Helpful" ratings (77.78%).

➤ **Bibliographical Service**

1. The majority of respondents from all NIPER campuses reported using a Bibliographical Database Service, with percentages ranging from 51.72% to 75%.
2. Adhoc Bibliographical Service: The usage of Adhoc Bibliographical Service varied among the campuses, with percentages ranging from 10% to 36.84%.
3. Both Services: A small percentage of respondents from each campus reported using both types of bibliographical services, with percentages ranging from 2% to 13.89%.

➤ **Current Awareness Service**

1. The most useful CAS service was the monthly addition of latest books, with percentages ranging from 41.67% to 58.54%.
2. Research Notes had the highest percentage of respondents finding it most useful, with percentages ranging from 55.17% to 58.54%.
3. Weekly content of current periodicals had the lowest percentage of respondents finding it most useful, with percentages ranging from 16.07% to 24.14%.

➤ **Document Delivery Service**

1. Online document delivery service is the most commonly used form, with percentages ranging from 41.38% to 57.14%.
2. Print Document Delivery: The print document delivery service is used by a smaller percentage of respondents, with percentages ranging from 16.67% to 26.83%.
3. Combination of Services: A significant percentage of respondents from each institution utilize all three forms of document delivery services, ranging from 14.29% to 30.56%.

➤ **Photocopy Service**

1. The majority of respondents reported that photocopy services took less than one hour, with percentages ranging from 72.41% to 92.11%.
2. None of the respondents reported that photocopy services took more than one day.

➤ **Catalogue of Library Holdings**

1. Online Public Access Catalogue (OPAC) Usage: 100% of the respondents from all the institutions reported using OPAC as their primary type of catalogue.
2. Absence of Physical Card Catalogue Usage: None of the respondents reported using a physical card catalogue exclusively.

➤ **Online Service**

1. Bibliographical Service Usage: The percentage of respondents utilizing Bibliographical Service varies across different NIPER campuses, ranging from 25% to 51.22%.

2. Full Text Service Usage: The percentage of respondents utilizing Full Text Service also varies across the campuses, ranging from 21.95% to 44.83%.

➤ **Need of Using different categories of Library services**

1. Research Work: The most needed library services for research work are "Online Services" and "Inter Library Loan Service."
2. Project Work: For "Project Work," the most essential library services are "Inter Library Loan Service" and "Document Delivery Service."
3. Study: The most needed services for study include "Catalogue of Library Holding," "Reference Service," and "Inter Library Loan Service."

➤ **Satisfaction Level of the Library Services**

1. Lending/Circulation Service: The majority of users were "Strongly Satisfied" or "Satisfied" with this service, with percentages ranging from 34.15% to 57.14%.
2. Reference Service: Satisfaction with this service varied among Libraries, with "Strongly Satisfied" users ranging from 11.11% to 51.72%.
3. Current Awareness Service (CAS): This service received a relatively high level of satisfaction, with "Strongly Satisfied" users ranging from 20.73% to 44.64%.
4. Document Delivery Service (DDS): Satisfaction with DDS was quite variable, with "Strongly Satisfied" users ranging from 5.36% to 39.02%.
5. Catalogue of Library Holding: This service received significant satisfaction, with "Strong

## **CONCLUSION**

The library collection and services provided by NIPER have undeniably played a pivotal role in fostering the social, educational, cultural, and economic well-being of

institutions nationwide. Serving a diverse user base across various socioeconomic backgrounds, these libraries have become indispensable hubs for knowledge dissemination. However, the potential for further advancements remains evident, particularly in terms of upgrading equipment, embracing advanced technologies, and enhancing overall facilities. To ensure continuous growth and meet evolving needs, it is imperative for NIPER libraries to focus on qualitative and quantitative improvements in their style and system of functioning. By doing so, they can solidify their position as dynamic and efficient contributors to the academic and intellectual landscape.

The majority of respondents in all NIPER Libraries are in the age group "Up to 30 years," comprising 77.85% of the total respondents. The second-largest age group is "31-40 years," accounting for 22.14% of the total respondents. The highest percentage of respondents across all NIPER Libraries visit the library daily (44.62%), followed by occasional visits (22.05%) and weekly visits (14.87%). Male respondents tend to visit the library more frequently than female respondents in certain categories, but this pattern may vary across different NIPER Libraries.

Books are the most frequently used information source in most NIPER Libraries for research work, while periodicals are commonly used as well. There are variations in the usage of different information sources across NIPER Libraries. Reference materials consistently have the highest satisfaction levels across most NIPER Libraries, followed by periodicals. Books, seminars/conference proceedings/workshops, and reprints/maps/globes tend to have lower satisfaction levels across most NIPER Libraries.

## **SUGGESTIONS**

- Enhance Access to Books and Periodicals: Since books and periodicals are consistently among the most frequently used information sources across the

institutions, it is essential to ensure easy access to these resources. Institutions should invest in building robust libraries with a wide variety of books and periodicals relevant to the academic and research needs of their students and faculty.

- **Diversify Information Sources:** While books and periodicals are commonly used, it is essential to encourage researchers and students to explore other information sources like theses/dissertations, seminars/conference proceedings/workshops, and reference materials. These sources can provide valuable and up-to-date insights on specific research topics.
- **Enhance Reference Materials and Periodicals:** Since Reference Materials and Periodicals consistently received high satisfaction levels across most NIPER Libraries, it's essential to continue investing in these resources. Ensure that these sources are regularly updated and cover a wide range of relevant topics.
- **Enhance Access to E-Journals:** E-Journals appear to be widely used across all NIPER institutes. To further support research and learning, institutes can consider expanding their access to a broader range of high-quality E-Journals in various pharmaceutical and related fields.
- **Promote Awareness:** The results indicate variations in awareness levels across different NIPER institutes. To ensure equitable access to Open Access resources, it is essential to promote awareness and information-sharing among all institutes. Conducting workshops, seminars, and training sessions on Open Access resources could be beneficial.
- **Strengthen Access to Indian Council of Medical Research (ICMR) Resources:** As ICMR resources are widely used across multiple NIPER Libraries, it is essential to ensure easy and efficient access to these resources. Institutes should

collaborate with ICMR or relevant organizations to provide seamless access to their publications and databases.

- **Strengthen E-Collection:** While the data for the e-collection's adequacy is not explicitly provided, it's essential to focus on electronic resources as they become increasingly vital for research and learning. Invest in electronic databases, e-books, and online journals to cater to the needs of tech-savvy users and those with limited access to physical resources.
- **Promote Lending Services for Periodicals:** Since the data shows that the usage of lending services for periodicals is relatively lower compared to books, there could be a focus on promoting and raising awareness about the availability and benefits of borrowing periodicals. This could be done through targeted marketing campaigns, posters, and announcements to emphasize the value and relevance of periodicals for academic and research purposes.
- **Promote Interlibrary Loan Service:** Institutions with lower usage rates, such as NIPER RAEBARELI and NIPER HYDERABAD, could focus on promoting the interlibrary loan service among their members. This could be done through targeted communication, workshops, or awareness campaigns to highlight the benefits of using the service.

#### **SUGGESTION FOR FUTURE RESEARCH**

- Assessment of Digital Literacy and Information Retrieval Skills Among Users at NIPER Libraries: Implications for Enhancing Information Literacy Programs.
- Exploring the Impact of Library Services on Research Productivity: A Comparative Study of NIPER Institutes and Other Pharmaceutical Institutions in India.

- User Satisfaction and Perception of Library Resources and Services at NIPER Libraries: A Mixed-Methods Approach.
- An Investigation into the Integration of Open Access Resources in NIPER Libraries: Trends, Challenges, and Opportunities.
- Evaluating the Effectiveness of Marketing Strategies for Promoting Library Services at NIPER Institutes.