

Case Study

Content Analysis of Library Web Portals of All India Institute of Medical Sciences (AIIMS): A Case Study

Mohammad Sharib¹, Naseem Eqbal², Mehtab Alam Ansari³

¹MLISc, ²Senior Research Fellow (SRF), ³Professor, Department of Library and Information Science, Aligarh Muslim University, Aligarh, Uttar Pradesh, India.

I N F O

Corresponding Author:

Mehtab Alam Ansari, Department of Library and Information Science, Aligarh Muslim University, Aligarh, Uttar Pradesh, India.

E-mail Id:

mehtabalamansari1@gmail.com

Orcid Id:

<https://orcid.org/0000-0002-2381-984X>

How to cite this article:

Sharib M, Eqbal N, Ansari M A. Content Analysis of Library Web Portals of All India Institute of Medical Sciences (AIIMS): A Case Study. *J Adv Res Lib Inform Sci.* 2024; 11(4): 25-33.

Date of Submission: 2024-09-05

Date of Acceptance: 2024-10-18

A B S T R A C T

The present study aims to investigate the information on the AIIMS, New Delhi library website and emphasise its significance to students, teachers, and medical professionals. With the growing need for digital resources in healthcare libraries, the main objective is to evaluate the website's organisation, usability, and e-resource availability. Ten major areas covering different facets of the library's website are analysed using a thorough checklist and content analysis as a methodology. The results show that although the AIIMS library website has good navigation and e-resource offerings, it is not equipped with sophisticated accessibility features or interactive capabilities. There is a need for improvement, given its lack of Web 2.0 involvement. The digital experience at the library would be improved by increasing accessibility, encouraging user participation, and broadening the range of materials available.

Keywords: Content Analysis, Medical Professionals, Website Evaluation, Web Portals, E-Resources, Databases, Library Service, B B. Dikshit Library, New Delhi, AIIMS

Introduction

The present study explores various features of the All India Institute of Medical Sciences (AIIMS) New Delhi library website and comprehensively analyses its current state and functionality. This study highlights the critical elements of a modern, user-centric library website and identifies areas where improvements can be made. The study examines the library website's structure, design, and usability, ensuring a more efficient and satisfying user experience. Furthermore, this research investigates the availability of general information features on the library website, such as institutional details, contact information, and access to library policies. These features are vital for providing users with a foundational understanding of the library's resources and services. It also assesses the availability

of website aids and tools, such as search functionalities, FAQs, and site maps, which are essential for improving user experience. The appearance and visual design of the website are evaluated, including layout, colour schemes, and graphical elements, which provide the overall appeal and ease of use. Additionally, the study investigates the range of languages the website supports, emphasising the importance of linguistic inclusivity to cater to a diverse user base. Lastly, the study evaluates the essential information and services provided by the library, including access to catalogues, databases, and e-resources. It also explores the integration of Web 2.0 tools, such as social media links, blogs, and user feedback options, which foster interaction and engagement with users.

All India Institute of Medical Sciences (AIIMS)

All India Institute of Medical Sciences is a medical institution and hospital located in New Delhi, India. Under the Government of India, the Ministry of Health and Family Welfare oversees a consortium of independent public medical universities offering advanced medical training and higher education. After independence, Jawaharlal Nehru laid out plans to carry out his vision of a nation established on scientific advancement. The establishment of the AIIMS commenced in 1952 by laying its foundation stone. Subsequently, in 1956, AIIMS was officially inaugurated as an autonomous entity by enacting an Act of Parliament.¹ Dr B. B. Dikshit Library (BBDL) was set up in 1956 to Honor Prof. Balachandra Babaji Dikshit, the institute's first founding director. The library serves pre-clinical and para-clinical students, faculty, and physicians and is recognized as a hub for scholarly and investigative endeavours. The library is in a two-story building divided into many sections. It is arranged neatly. The 27,000 square foot carpet has enough room to accommodate 400 individuals for seating.²

Objectives

- To find the general features provided by the AIIMS library websites.
- To evaluate the contents of the AIIMS Library website contents.
- To find library resources, services, and features on library websites.
- To identify the accuracy, accessibility, and user-friendliness of library websites.
- To find library websites that provide access to electronic resources and other facilities.
- To find the AIIMS Library website's strengths and weaknesses.

Review of Related Literature

Daniel et al. conducted a study on health science libraries with the help of the DEI team to promote inclusive language, focusing on avoiding biased, stereotypical, or discriminatory terms. They reviewed the library's website, Lib Guides, and signage. On the website, they found 20 instances needing improvement. Of 130 Lib Guides, 107 had language issues, with 14 requiring urgent changes and 116 needing suggestions.³ Al-Qallaf and Ridha analyzed 110 academic libraries in Gulf Cooperative Council countries. They discovered that merely three websites exhibited over 75% of features, while 40 websites demonstrated between 51% and 75%. Additionally, 45 websites displayed a range of 26% to 50%, and 22 sites possessed 25% or fewer features.⁴ Sahoo & Panda conducted a study investigating and assessing library websites' content and navigational strengths at IITs using globally recognized evaluation criteria. The findings are intended to provide recommendations for

improving and upgrading library websites at academic institutions.⁵ Vishwakarma et al. examined the changes in the e-learning platforms of AIIMS, New Delhi's library services. Employing various technologies in the library environment allows users to access various ICT-enabled library services in addition to their regular library services. Through ICT techniques, e-resources have been extensively supplied to authorized library users at any time.⁶

A study by Sharib et al. analyzed the content analysis of the Annamalai University library website of Annamalai University.⁷ Anna examined 34 public library websites in Indonesia; the survey assessed digital presence and services. Surprisingly, 55% (19 libraries) had no website. Among those with websites, only 26% had an OPAC, and just 6% offered digital collections. Despite limitations, most offered essential information about facilities, services, collections, operational hours, and events. The study recommended enhancements in knowledge portals, e-resources, user needs, and collaboration.⁸ Mehta and Trivedi assessed 45 central university library websites in India, highlighting various aspects of library information. Contents varied, with an introduction (80%), history (71.11%), contact information (68.88%), and copyright details (55.55%) being common. Library rules (68.88%), hours (66.66%), and privileges (60%) were emphasized, but information about mission and location was less prevalent. Services like issue-return (75.55%), internet access (68%), and reading room (68%) were detailed, while other specialized collections were fewer mentioned.⁹ Rafiq et al. focused on evaluating the quality of websites from high-ranked medical institutions worldwide, examining their facilities, information tools, resources, and user training opportunities. The study identified "patron-driven acquisition" as a rarely offered service among six institutions and noted that 42% of libraries did not utilize mobile apps.¹⁰

Velasquez and Evans conducted an extensive four-year study examining 1517 public library websites in Australia, Canada, and the USA. The research delved into multiple aspects, including website accessibility, the range of online resources, and the responsiveness of library staff. Employing a quantitative methodology, the study assessed each website against 18 criteria. Interestingly, the findings revealed that Canadian and US libraries had a broader implementation of criteria than their Australian counterparts.¹¹ Khawaja assessed the accessibility of public library websites for fans with restrictions. Using Deque's Axe assessment tool, 120 library site URLs were assessed for WCAG 2.1 consent. Findings demonstrated a persistent lack of adherence to Sect. 508 accessibility standards, primarily due to color contrast errors observed across all pages examined. Interestingly, no notable connection was established between the libraries' served community demographics and the prevalence of accessibility issues.¹² Hussain et al. investigated how the

National Medical Library (NML) in India was used in terms of its various collections and services. Among India's health science libraries, this library significantly contributes to the exchange of e-resources. NML has been offering various library services to make the most of the library collection using the newest ICT technology.¹³ Devi and Verma conducted a study to evaluate and analyze web content on the library websites of the IITs. The research used survey and observation methods to collect primary data from the library websites of 19 IITs. The data show that only four IITs have dedicated library web pages, with only one featuring a unique library website. Furthermore, very few IIT library websites provide information on their collections, services, value-added services, or access to Web 2.0 resources.¹⁴

Soorya et al. examined the content and interactivity of academic library portals across India, focusing on 100 selected library websites. The study employed a checklist and data sheet for data collection, with Microsoft Excel facilitating data analysis. Findings indicated a consistent pattern in content and interactivity across the websites. This study provides valuable insights for establishing design standards for library websites and portals.¹⁵ Billingham examined how Edith Cowan University (ECU) Library improved the accessibility of its website following the Web Content Accessibility Guidelines (WCAG). The study highlighted the importance of web accessibility for all users, particularly those with disabilities, and offered practical insights for other libraries seeking to enhance their website accessibility.¹⁶ Madhu and Kannappanavar evaluated India's National Institutes of Pharmaceutical Education and Research (NIPERs) library websites. Findings indicated that all NIPERs provided introductory library information and access to print and e-journals. NIPER Ahmedabad, distinguished by its use of CMS WordPress, achieved the highest usability score, yet no NIPER libraries offered interactive features such as feedback, FAQs, RSS feeds, or an "Ask a Librarian" service.¹⁷ Mandrekar and Rodrigues investigated college library services in Goa, India, during the Covid-19 pandemic. The study found that 29 out of 40 chosen college libraries had a visible web presence. The content of library websites was often disorganized, failing to meet user needs. The study highlighted the need for well-structured websites to deliver high-quality services during crises, and some college libraries lacked any online presence.¹⁸ Wani found that most IIM library websites provided core information, such as library hours (77.2%), services and regulations (61.1%), collections (72.2%), and e-resources (77.7%). Social media integration was minimal, with a few sites using Facebook (16.6%) and others incorporating LinkedIn, Twitter, or YouTube (11.1%).¹⁹

Methodology

Content analysis, a standard method in Library & Information Science (LIS), was used for this study, focusing on the web

content of library websites. Library websites are crucial in offering web-based services to researchers, faculty, and students, providing remote access to current, economical information. With the growing demand for innovative services, special libraries in India and abroad have developed websites to showcase their resources. While many studies have evaluated the websites of management, engineering, and universities, AIIMS libraries' websites have been largely overlooked. This research addresses that gap by evaluating the AIIMS New Delhi library websites. The investigator developed a detailed checklist to gather data from Library websites. Data was collected from the library webpages between Sep and Oct 2024 using a survey method and observation tools with a checklist of 140 criteria in Ten categories based on previous research conducted by Sahu and Sonkar,²⁰ Tunga,²¹ Thanuskodi²² and Surendran.²³ The content was categorized into two variables: "Y" (Yes) if present and "N" (No) if absent. The data collected were systematically tabulated and analyzed to facilitate interpretation and discussion regarding the library webpage. Ultimately, the interpretation of the data tables was constructed to enhance the presentation of the findings. Microsoft Excel was utilized to create the tables, conduct the necessary mathematical operations, and organize the data into columns and rows for clarity.

Data Analysis and Interpretation

Data collected through a checklist through internet surfing for contents of select AIIMS libraries websites are organized and tabulated. All the Information depends on the available data on the library website. The Data have been organized into 10 different tables based on the nature of the content. Each table has various data fields representing a separate category, in which the data set carries two variables, i.e., 'Y' and 'N', where 'Y' represents the availability of content on the website under study and 'N' represents the non-availability of content on the website under study.

General Information

Table 1. General Information available on the Website

S. No.	General Information	Yes/No
1.	About Institution	Y
2.	About Library	Y
3.	Mission Statement	N
4.	Working Hours/holidays	Y
5.	Library Events	Y
6.	Membership	Y
7.	External Membership	Y
8.	Library rules	Y
9.	Automation Software	Y

10.	Copyright	N
11.	Library Staff	Y
12.	Library Committee	Y
13.	Photo Gallery	N
14.	Sitemap/floor map	N
15.	Library Sections	N
16.	Open Access	Y
17.	Information organization	N
18.	Visitor Counter	N
19.	Date of Update	Y
20.	Annual Report	N

Table 1 presents the general information available on the AIIMS library website. This study provides information about the institution and library, working hours, membership options, library rules, and library staff, offering users basic insights into the library's structure and operations on library websites. However, notable omissions include a mission statement, copyright information, and sections on library organization, which could limit clarity about the library's guiding principles and content structure. Additionally, there is no sitemap or floor map, which may hinder ease of navigation, especially for new users. The absence of a photo gallery, visitor counter, and an annual report indicates limited transparency and engagement with users who may seek visual or statistical insights into the library's activities and performance. Enhancing these areas could improve both user experience and information accessibility on the website.

Navigation Features

Table 2. Information About Navigation Feature

S. No.	Navigation Features	Yes/No
1.	Main Menu bar	Y
2.	Websites maps/ layout	N
3.	Drop-Down Menus	Y
4.	Footer Navigation	N
5.	Catalogue option on homepage	Y
6.	Icon-based Navigation	N
7.	Language Switcher	Y
8.	Social Media Links	Y
9.	User Login in Homepage	Y
10.	Quick links	Y

Table 2 outlines the navigation features available on the AIIMS library website, emphasizing strengths and areas for improvement. Key user-friendly navigation elements, such as a catalogue option on the homepage, a main menu bar, drop-down menus, quick links, and a language switcher, make accessing relevant resources easier. Social media links provide additional channels for outreach and engagement. However, the absence of a website map/layout and footer navigation may limit navigational clarity, particularly for new users who could benefit from a more structured guide to the website. Additionally, the lack of icon-based navigation and a footer menu reduces accessibility and visual appeal, potentially impacting user experience. Enhancing these missing features would contribute to a more intuitive and efficient navigation experience on the library website.

Design Features

Table 3. Information about Design Features

S. No.	Design Features	Yes/No
1.	Appropriate Margins	Y
2.	Name on Home Page	Y
3.	Events Calendar	Y
4.	Visual Hierarchy	N
5.	Suitable Spacing	Y
6.	Identifiable Hyperlinks	Y
7.	Clean and Minimalist Layout	Y
8.	Search Option	Y
9.	Identifiable Headings	Y
10.	Logo on the Homepage	N
11.	Readable Font	Y
12.	Suitable Color Scheme	Y
13.	Hamburger Menu Button	N
14.	Image Carousels	N
15.	Top-to-down button	Y
16.	Header Notification	N

Table 3 evaluates the design features of the AIIMS library website, highlighting a mix of effective elements and areas needing improvement. The site includes fundamental design elements such as appropriate margins, readable fonts, identifiable headings and hyperlinks, and a clean, minimalist layout, all contributing to an organized and user-friendly experience. Additionally, an events calendar and search option enhance functionality and accessibility. However, some important features are missing, such as a

visual hierarchy, a logo on the homepage, and a header notification, which could improve branding and guide user attention. The absence of interactive elements like a hamburger menu button, image carousels, and a header notification limits dynamic user engagement. Addressing these gaps would enrich the website's visual appeal and enhance the overall user experience and ease of navigation.

Library Collection

Table 4. Information About Library Collection

S. No.	Library Collection	Yes/No
1.	Books	Y
2.	Periodicals	Y
3.	Patents/ Standards	N
4.	Magazines	N
5.	Newspaper	Y
6.	Audiobooks	N
7.	Encyclopedia/Dictionary	N
8.	Manuscripts	N
9.	Thesis	Y
10.	Museum Collections	N
11.	Suggested Readings	N
12.	CD/DVD	Y
13.	Other language Collection	Y
14.	Full-text articles	Y
15.	Vinyl/ Voice Records	N
16.	Maps	N
17.	Braille	N
18.	New Arrivals	Y
19.	Local/Historical Archives	N
20.	Research Report	Y
21.	Back Volume Journals	Y

Table 4 provides an overview of the library collection available on the AIIMS library website, showing a well-rounded but selective range of resources. The library includes essential academic materials such as books, periodicals, newspapers, theses, research reports, full-text articles, and back volumes of journals, which cater to the core needs of students, educators, and researchers. However, there are significant gaps in resource diversity, with no audiobooks, encyclopedias, museum collections,

or local/historical archives. Specialized resources like Braille materials and vinyl/voice records, which enhance accessibility, are also absent. Expanding the collection to include these diverse materials could significantly enrich the library's offerings and support a broader range of research and learning needs while making the library more inclusive and versatile.

Library Services

Table 5. Information About Library Services

S. No.	Library Services	Yes/No
1.	Circulation	Y
2.	Reference service	Y
3.	Reprographic service	Y
4.	Abstracting service	Y
5.	Indexing service	Y
6.	Bibliographic service	Y
7.	Research support service	Y
8.	ILL	Y
9.	Reading Hall	Y
10.	Wi-Fi	Y
11.	CAS	Y
12.	Book Recommendation	N
13.	Information Desk Service	Y
14.	Book Bank Service	Y
15.	Web OPAC	Y
16.	SMS Alert	Y
17.	E-Alert Service	Y
18.	Newspaper Clipping	Y
19.	User Education Service	Y
20.	My-LOFT Service	Y

Table 5 shows the library services provided by the AIIMS library, indicating a comprehensive range of offerings to meet diverse user needs. Core services like circulation, reference, reprographics, abstracting, indexing, bibliographic, and research support are available, forming a solid foundation for academic assistance. Additional resources, such as interlibrary loans (ILL), reading halls, Wi-Fi, and an information desk service, further enhance accessibility and convenience for users. Digital services, including Web OPAC, SMS alerts, e-alerts, and newspaper clipping services, demonstrate the library's commitment to staying current with user communication needs. However, some gaps remain, such as the absence of a

book recommendation service, which could facilitate more personalized user experiences. Including such services would further enrich the library's support for users and promote greater engagement with its resources.

E-Resources

Table 6. Information about E-Resources

S. No.	E-Resources	Yes/No
1.	E-Books	Y
2.	E-Journals	Y
3.	E- database	Y
4.	E- Thesis and Dissertation	Y
6.	Institutional Repository	Y
8.	Remote Access	Y
9.	CD ROM	Y
10.	Consortium	Y

Table 6 outlines the AIIMS library's provision of e-resources, showing a robust digital collection that supports its users' research and academic needs. Key resources, including e-books, e-journals, e-databases, and e-theses and dissertations, ensure extensive access to academic materials. Additionally, the availability of an institutional repository promotes access to in-house research, and remote access options make it convenient for users to access resources from anywhere. The inclusion of a consortium further enhances resource availability through collaborative access. This strong digital offering positions the library as a well-resourced academic support system; however, future expansions in specialized digital formats could continue to elevate the library's impact on research and learning.

Consultation Services

Table 7. Information about Consultation Services

S. No.	ConsultationServices	Yes/No
1.	Chatbot	N
2.	Email ID	Y
3.	FAQ'S	Y
4.	Contact No.	Y
5.	Postal/ Online Consultation	N

Table 7 evaluates the consultation services available on the AIIMS library website, highlighting a limited yet functional support system. Essential contact options such as email, FAQs, and a contact number are available, allowing users to seek guidance and support. However, the absence of a chatbot and online or postal consultation options suggests missed opportunities for more interactive and flexible user engagement. These features could enhance user support, providing real-time assistance and broader accessibility to cater to varying user preferences and needs.

Web 2.0 Tools

Table 8. Information About Web2.0 Tools

S. No.	Web 2. Services	Yes/No
1.	Linked In	N
2.	Twitter	Y
3.	Instagram	N
4.	Facebook	Y
5.	Blogs	N
7.	RSS Feed	N
8.	YouTube	Y
9.	Ask Librarian	Y
10.	Wikies	Y

Table 8 reviews the AIIMS library's Web 2.0 tools, showing a selective approach to social media and interactive platforms. Key channels like Twitter, Facebook, and YouTube are utilized, providing avenues for broader outreach, updates, and user engagement. Additionally, "Ask Librarian" and wikis enhance interactive support and collaborative information sharing. However, the absence of platforms like LinkedIn, Instagram, blogs, and RSS feeds limits the library's digital presence and potential for engaging a more diverse audience. Expanding these areas could broaden the library's reach, support community building, and improve information dissemination. Integrating a fuller range of Web 2.0 tools would make the library more accessible and foster stronger connections with its user base.

Website Accessibility Tools

Table 9. Information About Website Accessibility Tools

S. No.	Website accessibilitytools	Yes/No
1.	Contrast	N
2.	Monochrome	Y

3.	Highlight Links	Y
4.	Zoom	Y
5.	Font Size	Y
6.	Letter Spacing	N
7.	Row Height	N
8.	Highlight Heading	Y

Table 9 assesses the accessibility tools provided on the AIIMS library website, indicating some efforts toward enhancing inclusivity and revealing critical gaps. Key tools like monochrome mode, zoom, font size adjustments, link highlighting, and heading highlights support users with varying visual needs, enhancing readability and navigation. These features make the site more usable for individuals with mild visual impairments or preferences for customized text displays. However, the absence of essential tools such as contrast adjustment, letter spacing, and row height customization limits accessibility, particularly for users with more specific visual or cognitive needs. Introducing these additional accessibility options would foster a more inclusive experience, aligning the library with best practices for web accessibility and improving usability for a broader audience.

Miscellaneous Services

Table 10. Information About Miscellaneous Services

S. No.	Miscellaneous Services	Yes/No
1.	E-Registration	Y
2.	User Account	Y
3.	Differently-able Section	Y
4.	Mobile App	Y
5.	Lending Rules	Y
6.	Fine Details	Y
7.	Newsletters	N
8.	Mobile App	N
9.	Translation	Y
10.	Feedback/Suggestions	N
11.	Purchase Proposal	N
12.	Donation Rules	N
13.	Computers/E-Readers	Y
14.	Binding	N
15.	Real-Time Navigation/Dashboard	Y

16.	Awards	N
17.	Locker Facility	N
18.	Single Point Search	Y
19.	Weeding Out Policy	Y
20.	Training Program	Y

Table 10 highlights the range of miscellaneous services the AIIMS library provides, showing a thoughtful inclusion of features that enhance user convenience and accessibility. Key services like e-registration, user accounts, a section for differently-abled users, mobile accessibility, and real-time navigation/dashboard tools contribute to a modern, user-centred library experience. Practical resources, such as details on lending rules, fines, translation options, computer/e-reader access, single-point search, and a weeding-out policy, further support effective library management and user interaction. However, certain services, such as newsletters, feedback/suggestions, purchase proposals, donation rules, and locker facilities, are missing. These omissions indicate potential areas for enhancing user engagement, convenience, and library transparency. Expanding services to include these options would address practical needs and foster more substantial community involvement and satisfaction.

Major Findings

- The AIIMS library website includes essential information like institution background and library events but lacks key elements such as a mission statement, copyright information, and accessibility features for differently-abled users. This could limit the overall user experience.
- Navigation features are primarily user-friendly, with effective options like a catalogue and quick links. However, the absence of a website map and footer navigation may hinder usability, especially for less tech-savvy users.
- The website design is clean and functional, with readable fonts and identifiable hyperlinks. However, missing elements like a visual hierarchy and a logo on the homepage suggest opportunities for improvement in visual appeal and user engagement.
- The library boasts a substantial collection of core academic resources, including books and journals. However, it lacks diverse materials, such as audiobooks and local historical archives, which could enhance research support and attract a broader user base.
- A comprehensive range of services is available, including circulation and reference services and Wi-Fi access. The absence of newspaper clipping services indicates a gap in comprehensive support for research activities.

- AIIMS library offers an extensive array of e-resources, including databases and e-books. However, the lack of a structured digital library indicates room for development to facilitate better access and collaboration in research.
- Traditional consultation methods, such as email and phone support, are available. However, the lack of interactive features like chatbots may limit user engagement and timely assistance, highlighting an area for enhancement.
- The library effectively utilizes Web 2.0 tools like Twitter and Facebook for user engagement, but the absence of platforms like LinkedIn and Instagram suggests missed opportunities for broader outreach and community building.
- The website offers basic accessibility features such as adjustable font sizes but lacks more advanced options like contrast adjustment. This limits inclusivity for visually impaired users, indicating a need for improvement in accessibility.
- The library provides valuable miscellaneous services such as e-registration and computer access. However, the lack of feedback mechanisms and facilities like lockers indicates potential areas for improvement in user support and satisfaction.

Conclusion

The current study focuses on the content analysis of AIIMS, New Delhi's Library Web portal, and evaluates the contents available on the library website. A library website addresses several essential roles. It serves primarily as a digital workstation for users and librarians, enabling an easy-to-use interface that makes all electronic resources easily accessible. How well it works affects how well library staff help users find information. Whether users are conducting in-depth study or only need to find the location and availability of a particular book, the website could be beneficial or detrimental to their research activities. Dr. B.B. Dikshit's library is renowned for its vast array of biomedical science e-resources and medical materials. Being one of the top medical libraries in the nation, it provides high-quality services to a wide range of medical professionals, including AIIMS students and professionals in India and outside. Establishing a dedicated library website for BBDL is essential to maximize its utility for AIIMS, New Delhi users. Library-related information, resource lists, links to e-resources, and other significant announcements must be consistently updated and made accessible on this specialized library website for the benefit of its users.

References

1. AIIMS, New Delhi. About us. 2023. [accessed 2024 Feb 24]. <https://www.aiims.edu/index.php/en/about-us/2019-02-06-05-47-04>.
2. AIIMS, New Delhi. Library. 2023. [accessed 2024 Mar 19]. <https://www.aiims.edu/index.php/en/library>.
3. Morgan-Daniel J., Norton H. F., Edwards M.E. & Daley M. Developing and conducting a language inclusivity assessment on a health science library's website, Lib-Guides, and signage. *Journal of the Medical Library Association: JMLA*. 2024 Jan 16;112(1):48.
4. Al-Qallaf C. L. & Ridha A. A comprehensive analysis of academic library websites: design, navigation, content, services, and Web 2.0 tools. *International Information & Library Review*. 2019 Apr 3;51(2):93-106.
5. Sahoo S. & Panda K. C. Web content analysis of Indian Institute of Technology (IIT) library websites: An evaluative study. *Library Philosophy and Practice (e-journal)*. 2019;3949.
6. Vishwakarma, Khan, M. K. & Priya N. Changing library services in e-learning environment at AIIMS, New Delhi. [Conference presentation]. *IISER Pune*, 2017. <http://www.iiserpune.ac.in/~library/life2017/program/17/2-mk-vishwakarma.pdf>
7. Sharib, M., Ansari, M. A. and Egbal, N. Content Analysis of the Library Website of Annamalai University: An Evaluative Study. *J Adv Res Libr Inform Sci*. 2024, 11(2): pp.14-19.
8. Anna, N. E. Transformation of public library websites in Indonesia. *Library Hi Tech News*. 2018 Oct 19;35(8):10-4.
9. Mehta, J. & Trivedi, M. Contents of university library websites of central universities of India: an analysis. *International Journal of Research in Social Sciences*. 2015;5(3):701-15.
10. Rafiq, S., Ashiq, M., Ur Rehman, S. & Yousaf, F. A content analysis of the websites of the world's top 50 universities in medicine. *Science & Technology Libraries*. 2021 Jul 3;40(3):260-81.
11. Velasquez, D. L. & Evans, N. Public library websites as electronic branches: A multi-country quantitative evaluation. *Information Research: An International Electronic Journal*. 2018 Mar;23(1)
12. Khawaja, P. Accessibility of public library websites in the United States. *Universal Access in the Information Society*. 2023 Aug;22(3):1047-57.
13. Hussain, A., Kumar, K., Fatima, N. & Kumar, D. Study of information sources and services of the National Medical Library in India. *Library Philosophy and Practice*. 2010 Nov 1;480.
14. Devi, K.K. & Verma, M. K. Web content and design trends of Indian Institute of Technology (IITs) libraries' website: An evaluation. *COLLNET Journal of Scientometrics and Information Management*. 2018 Jul 3;12(2):165-81.
15. Soorya, M., Haneefa, K. M. & Shivani, K. T. Contents and Interactivity of Academic Library Portals in India.

- Library Philosophy and Practice*. 2022:1-7.
16. Billingham, L. Improving academic library website accessibility for people with disabilities. *Library Management*. 2014 Nov 10;35(8/9):565-81.
 17. Madhu, S. & Kannappanavar, B. U. Content Analysis of Library Websites of National Institute of Pharmaceutical Education and Research (NIPER's) Institutes of India: An Evaluative study. *Library Philosophy and Practice (e-journal)*, 2022. 7256
 18. Mandrekar, B. & Rodrigues, M. C. Importance of web based services during the pandemic: A critical analysis of the content of college library website. *Library Philosophy and Practice*. 2021 Apr 1;41(4):1-4.
 19. Wani, G. A. Content analysis of library website of selected Indian Institute of Management (IIM) in India: A study. *International Journal of Research in Library Science*. 2021;7(2):111-24.
 20. Sahu K. & Sonkar, S. K. Content analysis of NIRF ranked Medical Institute's Library websites of India: an evaluative study. *Library Philosophy and Practice (e-journal)*. 2021 Nov 21;6490.
 21. Tunga, S. K. Content analysis of library websites of national institutes in West Bengal, India: an evaluative study. *Library Philosophy and Practice (e-journal)*. 2021 Feb 9;5120.
 22. Thanuskodi, S. A webometric analysis of selected institutes of national importance websites in India. *International Journal of Library Science*. 2012;1(1):13-8.
 23. Surendran, B. Content Evaluation of Ayurveda College Library Websites in Kerala. *Research Journey*, 2021, 269(A): pp.43-49