

# Library Services Amidst the COVID-19 Pandemic: Study of Remotely Exploitable Electronic Academic Databases in Selected University Libraries in Nigeria

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**Abstract** - The study adopted a research design of the qualitative type to investigate library services amid the COVID-19 Pandemic using remotely exploitable electronic academic databases in two Nigerian foremost university libraries, as case studies. An Interview guide was used to elicit data from E-Librarians of the two Federal University libraries randomly selected for the study. The interview guide contains seventeen questions that seek to proffer answers to the main objective of the study. Response retrieved were analyzed using thematic analysis to extract codes, identify patterns, and create themes relevant to the study's objective. The study revealed that both libraries have a functional E-library and subscribes to key databases. The study also revealed that both libraries' websites are connected to open source databases remotely accessible to library users. The study reinforces the need to embrace the change in the global architecture of library services in the wake of the COVID -19 pandemic and make their E-resources remotely accessible to users. The study recommended that library managers should adopt best practices in providing users with remote access to their E-resources. Also, the study underscores the need for library managers to reappraise their memorandum of understanding with E-databases aggregator, allowing their E-resources to be remotely accessible to library users' thereby limiting users contact with their physical library environment amid the COVID-19 Pandemic.

**Keywords:** Library Services, COVID-19 Pandemic, Remotely Exploitable E-Databases, Foremost University Libraries-Nigeria

## I. INTRODUCTION

In the initial stages of pandemics such as COVID-19, Ebola, and SARS, confusion, turmoil, half-truths, and denial often prevail. However, while a nation's efforts to manage or contain a disease outbreak may become overwhelmed, early international responses marked by solidarity and support can effectively halt the spread of an epidemic or pandemic (Chatham House, 2020). Coronaviruses constitute a diverse family of viruses capable of infecting both humans and animals, leading to various illnesses, as noted by the World Health Organization (2020). These viruses are associated with a range of respiratory disorders, from mild common colds to more severe conditions. The emergence of the novel coronavirus, COVID-19, was first documented in Wuhan, Hubei Province, China, in 2019. Common

symptoms of COVID-19 include fever, dry cough, and exhaustion. According to the Nigeria Center for Disease Control (2020), the most effective strategy for controlling the spread of COVID-19 involves prevention through adherence to recommended guidelines for basic hand and respiratory hygiene. They advocate for measures such as ensuring the consistent wearing of face masks by students and staff in schools and other educational institutions, providing alcohol-based hand sanitizers at designated entrances, and promoting frequent hand washing.

Oladipo (2020) asserted that the coronavirus pandemic has inevitably triggered a digital transformation across various aspects of human life, particularly impacting the ecosystem of libraries and information management. The term "digital transformation," previously a buzzword, is now increasingly becoming a concept widely understood by all. Prior to the COVID-19 era, the realm of Information and Communication Technology (ICT) underwent a significant evolution, reminiscent of the transformation witnessed in the mid-19th century. Presently, ICT is orchestrating perhaps the most profound change in lifestyle since the advent of the automobile.

This emergence threatens the existing order, propelling the development of new infrastructure, mass production, and enterprises. In response, academic communities worldwide are heavily investing in scholarly communication to adapt and thrive. Education's primary objective, centered on disseminating knowledge through information sharing, intellectual discourse, and collaboration among stakeholders (lecturers, students, researchers, etc.), underscores the importance of this adaptation. The proliferation of ICT, while revolutionizing certain aspects of educational processes, has also challenged traditional library services. Within the contemporary higher education system, libraries have been among the first academic entities compelled to reevaluate their conceptual foundations and integrate the surge of information technology into their practices (Adediji, 2001).

Certainly, this transformation has significantly enhanced the understanding of the library's mission. The evolution of

electronic information resources has revolutionized information processing and management within academic settings in Nigeria (Toyo, 2017). An electronic database encompasses well-organized datasets, often serving as electronic repositories for full-text journal articles, bibliographic information, and supplementary materials such as books, reviews, reports, and conference proceedings. These online databases are accessible via the World Wide Web and can vary from general to niche platforms. Notable online databases utilized in Nigeria include EBSCOHOST, PROQUEST, EBRARY, SCIENCE DIRECT, JSTOR, HINARI AGORA, OARE, EBSCOHOST, and PROQUEST. However, it's important to note that certain electronic databases operate on a closed-access model, necessitating a subscription fee from subscribing libraries to grant access to their user community. Despite this, search engines can also yield a plethora of valuable information from the internet (Adeleke, Toyo, 2015; 2015). Ishola and Ielta (2016) previously highlighted in their study that the success of private university libraries in Nigeria in terms of service delivery and accreditation exercises heavily relies on their utilization of electronic databases.

Anunobi (2020) asserted that the COVID-19 lockdown provided librarians and information professionals with an opportunity to reassess their capabilities and offerings. However, her investigation into the websites of major university libraries in Nigeria revealed that while e-resources were available, the majority of virtual activities lacked interactivity. With COVID-19 guidelines expected to govern library services for the foreseeable future, Adeleke (2020) expressed apprehension regarding the post-pandemic reopening of libraries. Anticipating fewer in-person visitors and an increased reliance on online resources, Adeleke highlighted the strain on bandwidth and the likelihood of vacant spaces within libraries. Consequently, LIS professionals are compelled to encourage patrons to utilize online resources and enhance the remote accessibility of e-resources.

Reopening libraries amidst the pandemic is not without risks, as emphasized by Poon (2020), citing John Hopkins University (2020). Therefore, library managers have implemented necessary measures to ensure the safety of the library learning environment by transitioning services online and minimizing physical interactions. Against this backdrop, we conduct a case study on library services amid the COVID-19 pandemic, focusing on the remote accessibility of electronic academic databases in two prominent Nigerian university libraries.

## II. OBJECTIVES OF THE STUDY

1. Identify remotely accessible electronic databases available to library users.
2. Investigate the rationale behind the formatting of remotely accessible electronic databases.
3. Identify the electronic databases subscribed to by the university libraries under examination.

4. Explore electronic databases regulated by Intellectual Property (IP) laws and the motivations behind their formatting.
5. Assess the obstacles hindering the effective utilization of remotely accessible electronic databases.
6. Examine the difficulties encountered in the utilization of IP-regulated electronic databases.

## III. LITERATURE REVIEW

During the pandemic, academic libraries implemented various technologies such as electronic mail and artificial intelligence to provide unique services to users (Dube & Jacob, 2022). Similarly, Ishola-Isiwele (2021) emphasized the need for libraries to capitalize on the successes of COVID-19 by adapting their services to the evolving library environment and fostering a robust culture of online library services. Obeidat (2022) highlighted that the availability of digital content and online database access emerged as the most favored aspect of library services during the epidemic.

Libraries' active involvement in disseminating information to customers during the COVID-19 outbreak in Nigeria enhanced their reputation among information providers, as noted by Omeluzor, Nwaomah, and Sambo (2021). Momoh and Folorunsho (2022) observed that the COVID-19 epidemic prompted librarians to acquire new skills, leading to increased productivity in the post-outbreak years. Oche (2021) reported that Nigerian libraries maintained communication with users through various electronic distribution methods, social media, websites, and portals.

While the COVID-19 outbreak altered the landscape of libraries and information, it did not completely reshape it, according to Ashiq, Jabeen, and Mahmood (2022). However, there was an increased awareness of and reliance on electronic and digital library services, prompting library administration to adapt to this new trend (Zareef & Ahmand, 2021). Despite implementing safety measures, academic librarians in Nigeria still express palpable anxiety about their safety as the COVID-19 pandemic persists, as noted by Ishola, Adeyemo, and Babatunde (2022).

A closer examination reveals that Aboyade (2020) asserts that Nigerian university and college libraries faced underutilization of resources and services during the COVID-19 pandemic, citing limited access to information as a significant hindrance. Discussing library services amidst the pandemic, Abdulrahim (2020) outlined librarians' responsibilities, which include promoting public health awareness, providing access to recent research for researchers and clinicians, and ensuring basic library services during lockdowns. She highlighted the City Library in Abuja's efforts to offer extensive reading resources accessible online or via mobile devices, emphasizing staff support for remote resource access. Similarly, Alli (2020) underscored the importance of librarians in connecting clients with valuable online resources during the COVID-19 epidemic.

In analyzing the pandemic's impact, Osuikwe (2020) acknowledged that while society evolves, the COVID-19 crisis poses fresh challenges to education, information dissemination, and knowledge development. She stressed that the response to these challenges will determine whether libraries adapt to the "new normal" or fade into obscurity.

Yusuf and Gatiti (2020) highlighted librarians' duties during pandemics, including disseminating the latest research findings and catering to the needs of library users and researchers. Similarly, Jaeger and Blaabk (2020) noted that library electronic resources played a crucial role in granting users access to information during COVID-19 lockdowns. However, earlier studies by Toyo (2017) and Agyekum and Ossom (2015) indicated that electronic database utilization in Nigerian libraries faced barriers due to access limitations. The pandemic necessitated adjustments to online services, identifying those no longer viable, and enforcing COVID-19 protocols throughout library environments to ensure the safety of staff and users. Anunobi (2020) proposed strategies for libraries to enhance their relevance amidst the pandemic by introducing new services. In line with safety concerns, IFLA (2020) highlighted the risks faced by library professionals, including infection from contaminated surfaces and contact with potentially infected users. They recommended hygiene practices such as handwashing and avoiding face-touching.

Academic libraries, as noted by Laden, Haruna, and Madu (2020), have played a role in the pandemic by providing users with access to web-based resources like electronic books and journals. Ifijeh and Yusuf (2020) encouraged library professionals to innovate in service provision as learning institutions resume amidst the pandemic. They emphasized responsive website design, adoption of blended librarianship, and leveraging social networks to adapt to changes in teaching methods. Hinchliffe (2020) argued that libraries, having invested in information technology infrastructure and operating hybrid models, are well-equipped to respond to the pandemic. Despite physical closures, librarians have continued to deliver essential services, showcasing their adaptability and resilience.

### III. METHODOLOGY

The study employed a qualitative research design, specifically a case study approach, to examine library services during the COVID-19 pandemic, focusing on remotely accessible databases in two selected university libraries in Nigeria. Nworgu (2015) defines a case study as an in-depth investigation aimed at gaining comprehensive understanding of a social unit. The two selected university libraries, Kenneth Dike Library at the University of Ibadan and Hezekiah Oluwasanmi Library at Obafemi Awolowo University, were chosen based on their premier status, online presence, and provision of remotely accessible e-resources. Data were collected through interviews with key informants, namely E-resource librarians from both university libraries. An interview schedule comprising

seventeen main and probing questions was developed based on the study objectives. Thematic analysis was employed to analyze the interview responses, involving familiarization with the data, generation of initial codes, and identification of themes related to the study objectives. The findings were presented in tables and prose to provide insights into the study's objectives.

## IV. PRESENTATION OF RESULTS

### A. Background Information

The Kenneth Dike Library at the University of Ibadan hosts its resources on the university's main website, whereas the Hezekiah Oluwasanmi Library at Obafemi Awolowo University maintains a separate standalone library website for its resources. Despite this difference, both library websites offer interactive access to a range of electronic resources, including both free and proprietary databases.

*Objective 1:* Identify remotely accessible electronic databases provided by the libraries.

*Result:* All electronic databases available at both libraries can be accessed remotely via their respective websites. These databases include both subscription-based and free/open-access options. Table I provides a concise overview of the specific electronic databases remotely accessible to users in both libraries.

*Objective 2:* Investigate the rationale behind the formatting of remotely accessible electronic databases.

*Result:* The electronic databases studied in university libraries are formatted to facilitate remote access to information resources.

*Objective 3:* Identify the electronic databases subscribed to by the libraries.

*Result:* The university libraries under examination subscribe to a variety of databases, including Emerald, Science Direct, Springer, Ebrary, EBSCOHOST, Jstor, ALUKA, PROQUEST, WEB OF SCIENCE, and Research4life. However, most of these databases are IP-regulated, with the exception of Research4life from KDL.

*Objective 4:* Explore electronic databases subject to IP regulation and reasons for their formatting.

*Result:* Certain electronic databases in university libraries are subject to IP regulation, restricting access to users within the university premises. These databases include Springer, Jstor, PROQUEST, Emerald, Ebrary, Web of Science, Nature books, PROQUEST, and TEEAL. The formatting is primarily enforced to adhere to database owners' or intermediaries' policies, library regulations, prevent misuse, and ensure security by limiting access to authorized users.

TABLE I ELECTRONIC DATABASES REMOTELY EXPLOITABLE TO USERS

Sl. No.	Kenneth’ Dike Library	Hezekiah Oluwasanmi Library
1	Directory of Open Access Journals (DOAJ)	The New England Journal of Medicine
2	The Essential Electronic Agricultural Library (TEEAL)	ALUKA
3	JSTOR	Royal Society Journals Online
4	Nature Journals	
5	Directory of Open Access Books (DOAB)	Directory of Open Access Journals
6	BIOMED Central	PLOS
7	INTECH	EIFL.net free e-resources
8	ERIC	Directory of Open Access Books
9	POPLINE Bookboon	Hathi Trust
10	Emerald	Biomed Central
11	Springer	Highwire Press
12	Web of science	UWE Library Services (Free Law Journals)
13	Research4life (AGORA, HINARI, ARDI, OARE)	SciELO
14	JSTOR	Zlibrary
15	BIOONE	EIFL.net free e-resources
16	BIOMED Central	Pubmed Central
17	African Journals Online	UWE Library Services
18	Nature journals	Springer science

*Objective 5:* Assess the challenges associated with utilizing remotely accessible electronic databases.

*Result:* Users face various challenges when utilizing remotely accessible electronic databases, potentially hindering effective utilization and meeting their information needs. These challenges include slow internet connectivity, financial constraints for data subscription, and inadequate electricity supply to power electronic devices used for accessing such resources.

*Objective 6:* Examine the challenges related to utilizing IP-regulated electronic databases.

*Result:* The primary challenge associated with utilizing IP-regulated databases is limited access, which deprives users of necessary information and hampers the university libraries’ ability to fulfill their objectives.

**V. DISCUSSION OF FINDINGS**

According to Jaeger and Blaabk (2020), who asserted that electronic information sources from libraries facilitated access for users during the COVID-19 pandemic lockdown, the findings regarding remotely exploitable library electronic databases are consistent with their research. Similarly, Abdulrahim (2020) highlighted the City Library, Abuja’s provision of abundant reading resources accessible online or via mobile devices.

Furthermore, the study revealed that university libraries’ electronic databases are configured to enable remote access

to information resources. These outcomes align with the findings of Jäger and Blaabk (2020), who noted the availability of library electronic resources during pandemic-related lockdowns.

Additionally, Ishola *et al.*, (2016) emphasized the significance of electronic database usage for Nigerian university libraries’ service delivery and accreditation success, a notion supported by the presence of functional e-libraries and subscriptions to key databases like JSTOR, Aluka, Science Direct, Springer, and ebrary, identified in both libraries.

With regard to Objective 4, which aimed to identify electronic databases subject to IP regulation and the rationale behind their formatting, the findings resonate with earlier research by Adeleke and Toyo (2015) and Toyo (2017), highlighting the existence of closed-access databases requiring subscription fees for user access.

The utilization of electronic databases is restricted by IP regulations aimed at safeguarding intellectual property, enforcing library policies, adhering to database owners’ or intermediaries’ policies, and preventing misuse.

Additionally, access is restricted for security reasons, ensuring that only authorized individuals from subscribing institutions can access these resources. These findings correspond with previous research by Toyo (2017), which identified access barriers hindering electronic database utilization.

Similarly, the study uncovered challenges associated with using IP-regulated and remotely accessible electronic databases. Addressing these challenges adequately will be crucial if libraries aim to cultivate a robust culture of online library services and capitalize on the successes observed during the COVID-19 pandemic, as suggested by Ishola-Isiwele (2021).

## VI. RECOMMENDATIONS

1. Library administrators should implement optimal strategies to facilitate users' remote access to electronic resources.
2. Library administrators should reassess their agreements with electronic database aggregators, enabling all resources to be accessible remotely to library patrons, thus reducing physical interaction amid the COVID-19 Pandemic.
3. In light of the ongoing COVID-19 pandemic, libraries should prioritize digital services and restructure their operational framework upon reopening.
4. Universities and their stakeholders should allocate increased funding for library resources and services.
5. Academic library administrators must ensure strict adherence to COVID-19 protocols by both staff and patrons within library premises.
6. Upon reopening during the pandemic, librarians should explore the integration of artificial intelligence to minimize patrons' physical interaction with library materials and objects.

## VII. CONCLUSION

Based on the study's findings, it is evident that both libraries possess functional e-libraries and have subscriptions to essential databases. However, the subscribed electronic databases are predominantly subject to IP regulation, with the exception of research4life from KDL. Additionally, the investigation unveiled that both libraries' websites are linked to open-source databases, allowing remote accessibility for library users.

The study underscores the significance of patrons accessing library e-resources, as it enhances knowledge acquisition for personal and academic development, thereby assisting the parent institution in achieving its objectives. Consequently, there is a reinforced necessity to embrace the evolving landscape of library services globally, particularly in response to the COVID-19 pandemic, by ensuring all e-resources are accessible remotely to users.

## REFERENCES

- [1] Aboyade, M. (2020). Maximizing the Benefits of an Academic Library for Excellence in One's Career. *Being a paper presentation via Zoom at the National Association of Women in Academics Bimonthly Meeting for the Month of September 2020*.
- [2] Abdulrahim, N. (2020). Library Services Amidst Covid-19: The Experience of City Library, Abuja and Others. *Presentation at Nigerian Library Association Maiden Webinar on Emerging Role of Librarians During & Post COVID Era*.
- [3] Adedeji Okonlawon. (2001). *Libraries and Librarianship in Nigeria; Festschrift for Ezekiel Bej ide Bankole*. Lagos, Nigeria: Ikofa Press Limited.
- [4] Adeleke, A. (2020, September 16). Re-Jigging Library Services in Response to the New Normal. *A Da Webinar. Organized by Olusegun Oke Library, Ladoke Akintola University of Technology, Ogbomosho*.
- [5] Adeleke, A. (2020). Use of library and virtual Resources. In *Use of English. The Directorate of General Studies. Redeemer's University*, 15-37.
- [6] Alli, M. U. (2020). The COVID-19 (Coronavirus) Pandemic: Reflection on the roles of Librarians and Information Professionals. *Health and Library Journals*. DOI: 10.1111/HIR.12307.
- [7] Anunobi, C. V. (2020). Virtual Library Services During & After COVID 19: Skills & Materials Readiness of Academic Libraries in Nigeria. *Presentation at the Webinar on Emerging Role of Librarians During & Post COVID Era*.
- [8] Anuoluwa M. A., & Airen A. (2018, December 11). User education, adjustment factors and use of online databases by postgraduate students in Nigeria. *Open Information Science*, 2, 203-224. Retrieved from <https://doi.org/10.1515/opis-2018-0016>.
- [9] Agyekum, B. O., & Ossom, S. (2015). Awareness and Impact of Electronic Journals Usage by Faculty Members and Lectures in Kumasi Polytechnic, Ghana. *Information and Knowledge Management*, 5(1), 9-17.
- [10] Ashiq, M., Jabeen F., & Mahmood, K. (2022). Transformation of libraries during Covid-19 pandemic: A systematic review. *The Journal of Academic Librarianship*, 48(94).
- [11] Chatham House. (2022). Coronavirus Response. Retrieved from <https://www.chathamhouse.org/topics/coronavirus-response>.
- [12] Dolo-Ndlwana, N. (2013). Use and value of library's electronic resources by academics and postgraduate students at Cape Peninsula University of Technology (CPUT). (Master's thesis, *University of Cape Town, Cape Town, Republic of South Africa*). Retrieved from [https://www.researchgate.net/publication/274889494\\_Use\\_and\\_value\\_of\\_library's\\_electronic\\_resources\\_by\\_academics\\_and\\_postgraduate\\_students\\_at\\_Cape\\_Peninsula\\_University\\_of\\_Technology\\_CPUT](https://www.researchgate.net/publication/274889494_Use_and_value_of_library's_electronic_resources_by_academics_and_postgraduate_students_at_Cape_Peninsula_University_of_Technology_CPUT).
- [13] Dube, T. V., & Jacobs, L. (2022). Academic library services extension during the COVID-19 pandemic: Considerations in higher education institutions in the Gauteng Province, South Africa. *Library Management*. DOI: <https://doi.org/10.1108/LM-04-2022-0039>.
- [14] Momoh, E., & Folorunsho, A. (2022, June). Enhancing, Repositioning and Readjusting Library and Information Services Towards Maximal Productivity: Perspectives from the Post COVID-19 Era. *American Journal of Information Science and Technology*, 6(2), 37-41. DOI: 10.11648/j.ajist.20220602.14.
- [15] Ifijeh, G., & Yusuf, F. (2020). Covid-19 pandemic and the future of Nigeria's university system: The quest for libraries' relevance. *Elsevier, The Journal of Academic Librarianship*, 46(2020), 102226. Journal Homepage: [www.elsevier.com/locate/jacalibjournal](http://www.elsevier.com/locate/jacalibjournal) homepage: [www.elsevier.com/locate/jacalib](http://www.elsevier.com/locate/jacalib).
- [16] Hinchliffe, H. (2020). Survey of US academic libraries documents COVID-19 pandemic responses. *Illinois News Bureau*. Retrieved from <https://new.illinois.edu>.
- [17] IFLA. (2020). COVID-19 and the Global Library Field. Retrieved from <https://www.ifla.org/> on September 25, 2020.
- [18] Ishola-Isiwele, R. O. (2022). Survey of New Academic Library Policies, Programmes and Services Designed to Mitigate COVID-19 Pandemic. *Nigerian Libraries*, 54(1).
- [19] Ishola, B. C., Adeyemo, A., & Ogunbanjo, B. (2016). Availability, Accessibility and Use of E-Resources in Selected Private Universities in South Western, Nigeria. *Middle Belt Journal of Library and Information Science*, 14.
- [20] Ishola, B. C., Adeyemo, A., & Ogunbanjo, B. (2022). Academic libraries preparedness for reopening as the COVID-19 pandemic curve flattens. *World Libraries*, 23(2). Dominican University, School of Information Studies in River Forest, Illinois, USA. Retrieved from <https://worldlibraries.dom.edu/index.php/worldlib/article/view/596>.
- [21] Jæger, M. M., & Blaabaek, E. H. (2020). Inequality in learning opportunities during Covid-19: Evidence from library takeout. *Elsevier, Research in Social Stratification and Mobility*, 68(2020), 100524.
- [22] Nigeria Centre for Disease Control. (2020, August 25). COVID 19 Guidelines for schools in Nigeria. Retrieved from <https://ncdc.gov.ng/diseases/guidelines>.

- [23] Omeluzor, S., Nwaomah, A., & Sambo, A. (2021). Dissemination of information in the COVID-19 era in university libraries in Nigeria. *IFLA Journal*, 48(1). DOI: <https://doi.org/10.1177/03400352211037700>.
- [24] Osuikwe, N. (2020). Stakeholders engagement to drive innovative reforms for Libraries. *Presentation at Nigerian Library Association Maiden Webinar On Emerging Role of Librarians During & Post COVID Era*.
- [25] Obeidat, O. A. (2020). Evaluation digital library service during COVID-19 Pandemic: using user experience in academic libraries in Jordan. *European American Journals*, 6(3).
- [26] Oladipo, I. (2020, September 16). Retraining for Rejigging Library and Information Services During and the Post COVID-19 Era. *A Day Webinar. Organized by Olusegun Oke Library, Ladoke Akintola University of Technology, Ogbomosho*.
- [27] Nathaniel Agbo Oche. (2021, March). Observance of COVID 19 Protocols and Effective Use of Library Resources and Services in the State Universities in North Central, Nigeria. *American Journal of Information Science and Technology*, 5(1), 12-18. DOI: 10.11648/j.ajist.20210501.12.
- [28] Poon, L. (2020). Coronavirus Tests the Limits of America's Public Libraries. *Bloomberg Citylab*. Retrieved from <https://www.bloomberg.com/news/articles/2020-06-24/how-coronavirus-is-changing-public-libraries>.
- [29] Toyo, O. D. (2017). Undergraduates' Information Literacy Skills and the Use of Electronic Resources in Delta State University, Abraka, Nigeria. *International Journal of Education and Evaluation*, 3(1), 2489-0073.
- [30] Zareef, M., & Ahmad, Pr. (2021). The Impact of COVID-19 on University Library Services: A Systematic Literature Review. *Library Philosophy and Practice (e-journal)*, 6062. Retrieved from <https://digitalcommons.unl.edu/libphilprac/6062>.