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REJUVENATING ACADEMIC LIBRARIES FOR EFFECTIVE SERVICE DELIVERY IN THE POST COVID-19 ERA

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Abstract

This study focused on rejuvenating academic libraries for effective service delivery in the post COVID 19 era. The offering of online services in academic libraries has received attention as a result of the COVID-19 epidemic, with higher educational institutions all across the world adopting this development as the "new normal." The pandemic has posed several difficulties for most universities and its academic libraries, particularly for those with weaker online presence. It however sparked transformation and a re-evaluation of priorities; providing a new purpose for academic libraries that provide information services 24 hours a day. This mission focuses on access and connectivity to resources. Hence academic libraries need to be rejuvenated and prepared if they must be able to cope with the demands of the users who are now more comfortable with online/virtual library services. This study therefore reviewed literature on overview of COVID 19, overview of academic library services in Nigeria, academic library service in the post COVID 19 era, strategies for rejuvenating academic libraries for effective service delivery in the post COVID 19 era, importance of rejuvenating academic libraries for service delivery in the post COVID 19 era, as well as factors inhibiting academic libraries rejuvenation. The researchers used Google and other search engines to access scholarly articles from databases that are open access and are relevant to the study which formed the basis for the literature that was reviewed and from where conclusions were drawn.

Keywords: Academic Libraries, Library Service, Effective Services, Pandemic, COVID 19, Library Rejuvenation.

INTRODUCTION

Libraries are designed to address the information needs of students, researchers, and other individuals in the community; having long been seen as an essential and important part of the society. For students, libraries are a resource for information as well as a way to cultivate reading culture. For researchers, libraries are a way to conduct research, make discoveries, and publish findings. For the local community, libraries provide a large space for community outreach programs, engagement and awareness of local and global issues that affects them (Otiike, Bouaamri, Barát & Kiszl, 2021). The provision of correct information, in the right quantity and quality, at the right time and in the right place, is one of the core functions of a library. The aims and goals of libraries therefore have always been centred on facilitating access and connecting knowledge to the needs of people and the community (Kuhlthau, 2004). Offering specialized services and programs with the goal of educating, informing, or entertaining a diverse audience with the hope of fostering individual learning and advancing society as a whole, the library collects materials in a variety of formats, including printed and non-printed materials, that are organized by information specialists and are made accessible physically and digitally (electronically) (American Library Association, 2019). However, following the COVID 19 outbreak, a novel corona virus that emanated from Wuhan, China, in the year 2019, the methods and patterns of information services delivery in libraries have completely changed.

In December 2019, the novel Coronavirus (COVID-19) disease spread from Wuhan, China (Kandola, 2020). According to Chisita (2020), the disease has a high incidence rate and has had such serious effects that it was declared a global pandemic. These effects have had profound, historically unprecedented influence on all types of libraries. Since the outbreak of COVID 19, most academic libraries have stopped using their standard procedures because students left their campuses as a result of the pandemic's spread (Zareef & Ahmad, 2021). In an effort to keep students interested at home and complete their academic cycles, universities have begun to offer online teaching and learning methods. Some colleges are implementing a hybrid teaching strategy that blends traditional and online approaches in response to COVID-19. Because of the pandemic, university libraries' conventional approaches to meeting users' information needs—methods that necessitate direct connection between the library and users—have become ineffective (Ifijeh & Yusuf, 2020). Due to the

disruptive change in information dissemination profession brought about by the pandemic, libraries have been forced to innovatively change their services modus operandi by adopting and using technologies to offer services to the users over the Internet which has been tagged online or digital library services.

The dynamic trend of library customers adopting digital library services has accelerated as a result of the COVID-19 pandemic. Similar to how the pandemic has accelerated the growth of hybrid libraries, there are now numerous academic hybrid libraries with both physical and digital resources, and in some locations, traditional libraries are still used alongside digital ones (Asimah, Dzogbede & Akaba, 2021). Academic libraries are also gathering resources and using their ingenuity as the COVID 19 pandemic fades despite the significant negative effects of the pandemic on libraries all over the world, to develop and adapt operations, services, and programs to meet the shifting information needs of communities (Ameh, Ukwuoma & Oye, 2021). The Covid-19 pandemic has drawn attention to a fresh digital divide between the wealthy and the less fortunate in terms of access to broadband, technology, digital literacy abilities, high-quality technical support, and online resources that support and promote participation, collaboration, and self-sufficiency. Promoting technological inclusion, digital literacy, access to educational resources, and access to research materials among users during the pandemic is a significant issue for academic libraries that necessitated them changing their mode of service delivery in preparation for any future occurrence that may affect the traditional ways of providing information service to users in the library.

OVERVIEW OF COVID-19

The International Association for Medical Assistance to Travellers (IAMAT) (2020) avers that the broad family of respiratory viruses known as *Corona Viruses* is a respiratory virus that mainly spreads by saliva or discharge from the nose, as well as droplets produced when an infected person coughs or sneezes with the possibility of infecting both humans and animals. According to Cennimo (2022), the corona-virus disease of 2019 (COVID-19) is defined as illness caused by a novel corona-virus called severe acute respiratory syndrome corona-virus 2 (SARS-CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China. At the break out of this virus, it was deemed an international public health emergency, and on March 12, 2020, a pandemic was declared (WHO, 2020). The COVID-19 virus, which was brought on

by the SARS-CoV-2 virus, was initially identified in Wuhan, China, in December 2019, and it soon spread throughout the nation (Alam & Sultana, 2021). Since it was initially discovered, there have been more than 400 million instances of COVID-19, with a death toll of more than 5.48 million persons (JHU, 2022). The Coronavirus Preparedness Group was established in Nigeria on January 31 as a result of the WHO statement (a country with 36 states and a Federal Capital Territory [FCT]). Regarding the spread of COVID 19, the WHO identified 13 high-risk African nations, with Nigeria being one of them. Due to the inadequate state of the healthcare system, Nigeria is also one of the weaker African countries (Marbot, 2020).

The 36 states of Nigeria's fast reaction teams have already completed their training, according to the Nigerian Centre for Disease Control (NCDC). The NCDC further disclosed on January 28 that a Corona-virus Group had been formed to activate its incident mechanism in the event of an emergency. Along with that, the NCDC collaborated with 22 Nigerian states to activate their emergency operations centres and connect them to the national occurrence coordination centres (Ihekweazu, 2020). Nigeria recorded its imported COVID-19 index case on February 27 despite the government having increased airport surveillance since January 2020. This sparked questions about the efficiency of airport security and, consequently, the nation's overall readiness. The Italian index patient had traveled to a few other federation nations before testing positive for COVID-19. A multi-sectoral National Emergency Operations Centre (EOC) was activated by the NCDC after the index case was discovered to coordinate the country's response to COVID-19. On March 9, 2020, the Presidential Task Force (PTF) for Corona Virus Control was established. Travelers from 13 COVID-19 high-risk nations were prohibited from entering the country, according to the PTF. The self-isolation of those who had returned from the impacted countries was then observed by the NCDC and the Port Health Services. Many others were worried that the ban on high-risk nations would have gone into effect right now. The country had more imported cases when the prohibition went into effect. Unfortunately, the majority of those who entered the nation did not adhere to the NCDC's advice to practice self-isolation for 14 days (Amzat et al., 2020).

All of the verified COVID-19 cases in the nation between February 27 and March 17, 2020 (the first 30 days), according to the NCDC, were brought in by travellers who were returning home. 81 clinically confirmed cases had been reported in 10 states of Nigeria as of March 27, one month after the initial incidence. One death was reported, and three patients

had entirely recovered. Lagos State had the most cases at this time (52, or 64.2%). By April 5, there were 232 positive cases, an exponential rise in the number of cases. The death toll had increased to five, while 33 people had recovered and 14 states in Nigeria had positive cases (Amzat et al., 2020). The spread of the corona-virus in Nigeria affected many institutions, organisations, schools, businesses and libraries were not exempted.

OVERVIEW OF ACADEMIC LIBRARY SERVICES IN NIGERIA

Omosekejimi, Ijiekhuamhen, and Nweke (2022) define an academic library as one that assists students and instructors at academic institutions above the secondary level with their teaching and research needs. Both supporting the school's teaching and assisting faculty members and students with their research are obligations made by these libraries. Academic libraries are information hubs that support their parent institutions' goals of producing knowledge, empowering individuals with knowledge to serve society, and increasing the welfare of humanity, claims Oyegunle (2013). Academic libraries are set up in higher education institutions to assist learning, teaching, and research. They are also crucial to the development of the different departments' curricula at their parent institutions. Universities, polytechnics, colleges of education, and schools of nursing libraries can be classified as academic library (Aina, 2004).

Libraries in higher educational institutions, according to Oyegunle (2013), exist to foster learning and knowledge acquisition as well as acquire, make accessible, and preserve information resources that users may require. They also exist to make information available when the user become aware of their need for it. Academic libraries offer some extremely important services to their users in order to achieve the aims and objectives that have been defined. In order to satisfy the needs of their respective communities, which are made up of students, teachers, and researchers, academic libraries are at the forefront of offering information services. Academic libraries' effectiveness and quality are correlated with their staffing, resources, facilities, and physical space (Awotola & Olowolagba, 2018). Yu (2003) as cited in Awotola and Olowolagba (2018) claim that among other things, basic introduction to library services, OPAC instruction services, searching tools, internet instruction services, CD-ROM services, and databases services are the most frequently offered services/programs to meet the needs of academic library users. The various services that are provided to library users at Delta State University library include cataloguing and classification services, circulation services, reservation services, current awareness services, selective information dissemination, abstracting and indexing services, reference services, document delivery

services, and more, according to Arumuru's (2015) study on marketing academic library services for effective service delivery in Delta State University library.

In academic libraries, all of these services are provided to patrons in order to meet their information demands. Academic library services today, in the twenty-first century, are increasingly concentrated in the fields of digital, virtual, or libraries without boundaries, all of which have caused transition and change in the academic library environment. Along with the change and evolution, users' information needs are becoming increasingly sophisticated and are expanding quickly (Abubakar, 2011). He further expanded that, change is a result of how ICTs, the internet, and the web are affecting libraries of all kinds.

ACADEMIC LIBRARY SERVICES IN THE POST COVID 19 ERA

Libraries, especially academic libraries employed various means of reaching out to their patrons when lockdown was implemented across nations of the world in the heart of the pandemic. Considering that lockdowns created physical barriers between librarians and their patrons, information and communication technologies (ICTs) became very useful tools for service delivery (Chisita, Chiparausha, Tsabetse, Olugbara & Letseka, 2022). The COVID-19 pandemic demonstrated the need for digital transformation and its ability to guarantee service continuity in emergency situations (Fletcher & Griffiths, 2020). By providing students who were unable to attend school due to the pandemic with a wider range of learning opportunities, the use of digital technologies in education helped to close the digital divide, minimize disruptions to teaching and learning activities, and support students' individualized learning. To prevent higher education institutions from being left behind or taken by surprise, as happened during COVID 19 total lockdown; these technologies are currently being expanded upon and consolidated. Academic institutions in particular are seriously embracing the use of technologies in the delivery of their services, and libraries are following suit. This is done to ensure that users are not denied access to information services in the event that future events prevent physical access to the library.

Online/virtual reference services, database services, and institutional repository (IR) services are the three main novel services provided to users in academic libraries following COVID 19. These three online resources complement one another and enable academic libraries to connect with their users wherever they may be. These services are elaborated below:

1. **Online Reference Service:** Reference work includes providing direct, one-on-one assistance to anyone seeking information at a library for any reason, as well as other library activities designed specifically to make knowledge as accessible as possible (Dawar, 2013). The pandemic's physical access restrictions forced the library to turn on its online reference services so that customers could digitally meet their information needs without having to physically visit the library. The Ask a Librarian feature is now active on the portals of several university libraries. Academic libraries provide assistance through the "Ask a Librarian service" feature which allows students to contact librarians in real time via email or the use of Web 2.0 tools. On the library's homepage, there is a link to the service. According to Abdulkadir and Mohammed (2021), some of the Web 2.0 tools and other social media and online platforms that can be used to provide online services in the library in the post-pandemic era are:

- ✓ **Blogs:** A conversation or informational website published on the World Wide Web that consists of brief, frequently casual diary-style text updates is known as a blog (a contraction of "weblog") (posts). The most current post usually displays first at the top of the page when posts are presented, which makes it easier to access and provide exact information. Both teachers and students can use blogs to stay updated on happenings. They are also helpful for starting conversations.
- ✓ **Zoom:** A zoom license can be purchased by an academic library to create a free account. It is perfect for quickly scheduled meetings. Zoom provides a free, fully functional basic plan with unlimited meetings. A live meeting with a user or users of the library can be hosted by librarians. Through an invitation link provided to their email, they can invite students to meetings. As a result, they can participate in the sessions immediately through the Zoom software.
- ✓ **GoToMeeting:** It is a set of online meeting, desktop sharing, and video conferencing software that enables you to have real-time online meetings with other computer users, customers, clients, or coworkers.
- ✓ **Skype:** Free voice conference calls allow up to 50 people to participate in a video or audio group call simultaneously.

Other platforms that are being used by librarians for rendering virtual/online reference services to their users are Facebook, WhatsApp, Instagram, Flickr and messengers such as Yahoo Messenger and MSN Messenger among others.

2. **Database Services:** Chukwueke (2016) defined databases as e-journals and eBooks that are in full-text and that allows users to access through the Internet to search and retrieve

information. Academic libraries in their effort to avoid the flow of information between them and their users have intensified their acquisition of library management software in an effort to ensure that users are able to have access to the resources of their library while also subscribing to paid databases such as OARE, JSTOR, AGORA, HINARI, GOALI, HEIONLINE, LAWPAVILION and EBSCOHOST among others are allowing access to these databases so that the information needs of their users can be met.

3. **Institutional Repository (IR) Service.** An archive for gathering, maintaining, and sharing digital copies of an organization's intellectual output, especially that of a research institution, is known as an institutional repository. Institutional repository (IR), according to Clobridge (2010), is a collection of digital items and related metadata from a particular institution. The term "institutional repository" is frequently used informally to distinguish between those systems and services that support other types of digital objects versus those that collect and disseminate scholarly content (peer-reviewed articles written by faculty, electronic theses and dissertations) (i.e., digital images of artwork). After conferring with them online, reference librarians frequently point patrons of academic libraries toward the library's institutional repository or database. Because users' information demands can be easily addressed by proper use of this service as offered by the library, institutional repositories and databases of academic libraries are now functioning as valuable tools to users.

STRATEGIES FOR REJUVENATION ACADEMIC LIBRARIES FOR EFFECTIVE SERVICES DELIVERY IN THE POST COVID 19

It is worthy of mention that, in spite of the disruption brought upon academic activities in universities and other higher institutions of learning and subsequently the library as orchestrated by the total lock down imposed by various governments on nations across the world as a result of COVID 19 pandemic, many higher institution and their libraries especially in developing nations such as Nigeria were not able to flow with the trend of educating their students virtually, while most academic libraries were on total shutdown in compliance with the lockdown, as all their services and resources can only be traditionally/manually delivered to their users. Therefore, academic libraries in developing nations such as Nigeria, needs to be rejuvenated to prepare them for electronic/virtual services in the post Covid 19 era. Also, to be able to effectively render services to their users in the case of future unforeseen occurrence that may necessitate virtual library services. Some of the strategies that could be employed by academic libraries include:

1. Massive Adoption of ICT Facilities: In the wake of the Covid 19 pandemic, information and communication technologies (ICT) and its numerous facilities have become the most influencing factors of today's information society. The adoption and usage of ICT in libraries now facilitate information acquisition, storage, retrieval, dissemination, searching, viewing and handling (Qutab, Bhatti & Ullah, 2014). Academic libraries are able to use ICT facilities for routine library work such as book and serial acquisitions, classification and cataloguing, as well as provision of services such as reference service, user orientation service, circulation service, inter library loan, document delivery. So, the challenges experienced in their attempt to render information service to the users during the lockdown can be avoided with the adoption of ICT facilities and the urgent implementation of the 21st-century ICT infrastructure.

2. Adoption of Solar-Inverter Technology: The back bone of electronic library services is power; i.e. electricity to run the gadgets that are being used for the electronic services (Ogo, Omosekejimi & Ebhonu, 2021). For academic libraries to be able to meet up with the demands of their users in the post pandemic era, there is need for such library to get her services running on the Internet without disruption. As a result, academic libraries should think about adopting and utilizing solar-inverter technology as a backup for the nation's increasingly unreliable energy supply. The virtual service of the library cannot fully satisfy the needs of the customers if there is no continuous electricity to power the ICT infrastructure of the library, such as computers, library management system servers, institutional repository servers, etc. This supports the claim made by Ogo, Omosekejimi, and Ebhonu (2021) that the inadequate power generation and distribution in Nigeria has made it imperative to improve the quality of library services in higher education institutions using solar-inverter energy backup.

3. Availability of Functional Internet Service: Users can only access the library's virtual/online services when the Internet is up and running. Numerous studies have noted that one of the difficulties encountered with using ICT and providing online services is the poor status of internet connections in university libraries (Qutab, Bhat & Ullah, 2014; Ezecheta, 2022). To ensure that users can access the library's resources at any time of the day, the library must give the library management system, which houses the OPAC, the Institutional Repository (IR) server, and the server housing the paid (subscribed) databases of the library, including AGORA, HINARY, and EBSCOHOST, a live Internet Protocol address. This is only possible if the library has constant internet connectivity.

4. **Recruitment of Sound Information Technology Background:** The majority of librarians lack basic knowledge in computer science and information technology despite rising to the challenge presented to them by the rise and proliferation of ICT. So that the librarians can assist in properly resolving problems such system crashes, computer viruses, network issues, and system security, among others, the library needs the assistance of personnel who have background knowledge of computer science or information technology.

5. **Training and Retraining of Librarians:** It is important to highlight that the modern library has moved from a manual system to one that is technology-driven. In the post-pandemic age, technology has not only been employed to enhance the library's resources and offerings, but it has also led to a dramatic change in how services are provided. In the Library 4.0 environment, librarians and other library staff members must be flexible, innovative, and creative. They also need to understand the nature of information service in the technological age (Emezie & Nwaohiri, 2013). As a result, in order for libraries to operate efficiently in the twenty-first century and for librarians to effectively serve their clients' information needs, they must be trained and retrained to keep up with the technological advancements that have been increasingly common in recent years (Omosekejimi, Eyaufe, Nwobu and Nweke, 2019). Academic librarians must be skilled in all facets of information handling in the twenty-first century, including the use of cutting-edge technology and the administration of both human and non-human resources in their libraries. The effectiveness of these professionals in providing information services using ICT facilities depends on the extent to which they have obtained pertinent education, training, skills, and competences (Omosekejimi, Ijiekhuamhen & Nweke, 2022). Emezie and Nwaohiri (2013) list a number of the areas where librarians need training and retraining, including developing strong interpersonal skills, ICT proficiency, information literacy proficiency, and other related areas. According to Omekwu and Echezona (2008), librarians need to be trained in both fundamental and advanced computer skills, as well as proficiency with search engines, internet resources, e-mail, internet navigator tools, web browsers, and web file formats, database software, and internet development and management knowledge.

IMPORTANCE OF REJUVENATING ACADEMIC LIBRARIES FOR SERVICE DELIVERY IN THE POST COVID 19 ERA

It is no gainsaying that, rejuvenating academic libraries especially in developed nations of the world has helped them to rise to the occasion and the challenges encountered when trying to render services to the users in the pandemic era. Academic libraries in

industrialized countries like the US are currently able to provide free content and customised collections so that its users can carry on reading and learning without interruption. In order to create innovative venues for distance learning, university libraries need to be revitalized to embrace information technology and online services. Zhou (2022) asserts that in the context of non-contact education, preparing academic libraries for online service offering has taken precedence. A few reasons why academic libraries need to be revitalized to be ready to provide services in the post-pandemic age include:

1. Academic libraries are able to effectively reach their users and support distance learning without any obstruction in the form of quarantine restrictions.
2. Through rejuvenation of library services, academic libraries have improved their infrastructure and launched new services (such as non-contact delivery of books and interlibrary loan) to overcome the limitations of paper-based operations (Zhou, 2022).
3. It can be said that the pandemic had a positive impact on academic libraries, as it has facilitated the development of new digital paradigms and promoting online content.
4. Librarians practising in academic libraries have been forced to come out of their comfort zone to embrace the adoption and use of ICT facilities to reach their users who were unable to physically visit the library during the lockdown. It also ensured that librarians are equipped enough to virtually communicate and render services to their users in case of other future unforeseen circumstances that can impose ban on physical movement of people from one place to another which can affect the library.
5. It helps to ensure that staffs of academic libraries are equipped with the necessary training that is required for them to effectively render virtual/online information services.
6. It helps academic libraries to create strong digital presence that can withstand any future occurrence that may put barrier on the physical access to the library.
7. It helps to create positive impression of the academic libraries in the minds of the users.
8. All round performance of the library is enhanced and increased.
9. The library can effectively render round the clock services to her users.

FACTORS INHIBITING ACADEMIC LIBRARY REJUVENATION

In spite of the numerous benefits of rejuvenating the libraries for services delivery in the post pandemic era, there exist some factors that inhibits academic libraries from wholly and properly rejuvenation and preparation for service delivery in the post covid 19 and for other reasons as the needs arises in the future. Some of these inhibiting factors are:

1. **Poor Funding:** Finance is a key factor for proper and wholesome rejuvenation of academic libraries. The greatest enigma of ICT facilities and other electronic information resources such as databases is pricing which are not fixed as in case of printed material. Due to abysmal budgetary allocation to libraries, the financial might that is needed to adequately reshape the library technologically is missing. This put limitations on academic libraries to purchase and install all the ICT facilities that are required for the desired transformation.
2. **Low Maintenance Culture:** Whether in the home, office, school, or factory, Nigeria tragically lack maintenance culture. Edogiawerie (2020) noted that Nigeria's widely acknowledged issue of poor maintenance culture has had negative impact on the standard of public properties. To maintain the efficacy of ICT equipment in libraries, such as computers and servers, appropriate maintenance is required. Some library staff members' carelessness with regard to upkeep of the ICT facilities in libraries cause these systems to malfunction quickly. It takes a while for these systems to be fixed or replaced when they are broken thereby hampering their usage when necessary.
3. **Poor Management of Academic Libraries:** ICT and other important facilities do not fly into the library by accident. It involves coordinated effort to select, acquire and maintain them; and this responsibility solely rest on the Management of academic libraries. Bothmann and Holmbery (2006) identified the challenges of managing ICT facilities in libraries to include wrong planning, wrong policies and uncoordinated workflow. Okoye and Ugwuanyi (2012) identified poor managerial skills, poor budgeting and poor communication as major challenges.

CONCLUSION

The new reality faced by academic libraries present innumerable financial, administrative and pedagogical challenges created by the current declining economic climate and the significant pressure placed by the pandemic to reduce students' presence to the physical campus. In addition to increasing pressure on libraries, the move to a seamless

provision of online resources and services to fulfil students' need as they shift to online learning settings has also created significant anxiety about the future. Despite these difficulties, it is clear that academic libraries are still important because those in wealthy countries responded to the global COVID-19 pandemic in a proactive manner. Though, a good number of academic libraries in Nigeria are currently reviving and preparing themselves through adoption, application, and use of digital technologies, which have become a special vehicle for enhanced library service provision; majority of them were caught unprepared for exclusive online library services due to the restrictions brought about by the pandemic. With this development (academic library rejuvenation), they will be better able to compete with other academic libraries around the world and be ready for unforeseen events like the COVID 19.

RECOMMENDATION

This study suggested the following recommendations:

1. In a time of uncertainty, librarians in academic libraries should continually re-evaluate or recalibrate their attitudes, goals, and expectations with regard to service delivery;
2. Librarians in academic libraries should be outfitted with mobile devices that work with multiple applications to improve library service delivery in an online environment anywhere, to break down the barrier of location;
3. Librarians in academic libraries should make sure that their plans for handling disasters include measures for handling pandemics. To reduce risks associated with, but not limited to the loss of resources, social, intellectual, and human capital, such strategies should be futuristic and
4. The COVID-19 pandemic should be viewed as an opportunity or a learning curve for librarians to draw lessons from best practices on reacting to pandemics and plan for sustainable service provision in the post COVID-19 era.

REFERENCES

- Abdulkadir, A., & Mohammed, H. W. (2021). E-learning platforms for COVID-19 Nigerian academic libraries. *Sch Bull*, 7(8), 229-235. DOI: 10.36348/sb.2021.v07i08.005
- Abubakar, B. M. (2011). *Academic libraries in Nigeria in the 21st Century*. Retrieved from: <https://www.researchgate.net/publication/277262052>
- Aina, L. O. (2004). *Library and Information Science Text for Africa*. Ibadan: Third World Information Services.
- Ameh, G. J., Ukwuoma, H. C., & Oye, P. O. (2021). COVID 19 pandemic and evolving library and information services: Lessons for Nigeria. *International Journal of Development and Management Review (INJODEMAR)*, 16(1), 75-87.
- American Library Association. (2019). Definition of a library: General definition. [Libguides.ala.org](https://libguides.ala.org). URL: [https](https://libguides.ala.org), 12-14.
- Amzat, J., Aminu, K., Akinleye, A. A., Ogundairo, J. A., & Danjibo, M. C. (2020). *Coronavirus outbreak in Nigeria: Burden and socio-medical response during the first 100 days*. DOI: 10.1016/j.ijid.2020.06.067
- Arumuru, L. (2015). Marketing of academic library services for effective service delivery in Delta State University Library. *Developing Country Studies*, 5(20), 43-49.
- Asimah, A. P. A., Dzogbede, O. E., & Akaba, S. (2021). Digital library usage during the covid 19 pandemic. *Library Philosophy and Practice*, 0_1-15.
- Awotola, U. C., & Olowolagba, J. A. (2018). The use of academic library resources and services by undergraduate in Ibadan North Local Government of Nigeria. *GNOSI: An Interdisciplinary Journal of Human Theory and Praxis*, 1(2). DOI: <https://doi.org/10.5281/zenodo.3519581>
- Bothmann BL, Holmberg M (2006). Electronic resources planning and management. Unpublished electronic survey conducted on ERIC from 27 November to I December 2006.
- Cennimo, D. J. (2022). *Coronavirus disease 2019 (COVID-19)*. Retrieved from <https://emedicine.medscape.com/article/2500114-overview>

- Chisita, C. T. (2020). Libraries in the midst of the coronavirus (COVID-19): Researchers experiences in dealing with the vexatious infodemic. *Library Hi Tech News*, 37(6), 11-14. Retrieved from <https://doi.org/10.1108/LHTN-03-2020-0022>
- Chisita, C. T., Chiparausha, B., Tsabetse, V., Olugbara, C. T., & Letseka, M. (2022). Remaking academic library services in Zimbabwe in the wake of COVID-19 pandemic . *The Journal of Academic Librarianship*, 48. Retrieved from <https://doi.org/10.1016/j.acalib.2022.102521>
- Chukwueke, C. (2016) *Availability and utilization of electronic information resources by undergraduates students*. Unpublished Undergraduate Project, Department of Library and Information Science, Michael Okpara University of Agriculture, Umudike.
- Clobridge, A. (2010). *Building a digital repository program with limited resources*. Retrieved from <https://www.sciencedirect.com/topics/computer-science/institutional-repository>
- Dawar, V. A. (2013). *Online reference service*. Retrieved from: <https://www.researchgate.net/publication/335389830>
- Edogiawerie, S. (2020). Factors militating against effective utilization of electronic resources by pastors undergoing theological Training in Edo land. *Himalayan Journal of Humanities and Cultural Studies*, 1(1), 1-10.
- Emezie, N. A., & Nwaohiri, N. M. (2013). 21st Century librarians and effective information service delivery. *Journal of Information & Knowledge Management*, 4(1), 30-43.
- Ezecheta, W. C. (2022). The extent of availability and utilization of ICT facilities by undergraduate students for research in academic libraries: A case study of Rhema University, Aba. *Library Philosophy and Practice (e-journal)*. 7171. Retrieved from <https://digitalcommons.unl.edu/libphilprac/7171>
- Fletcher, G., & Griffiths, M. (2020). *Digital transformation during a lockdown*. DOI: 10.1016/j.ijinfomgt.2020.102185
- Ifijeh, G., & Yusuf, F. (2020). Covid–19 pandemic and the future of Nigeria's university system: The quest for libraries' relevance. *The Journal of Academic Librarianship*, 46(6).
- Ihekweazu, C. (2020). *Steps Nigeria is taking to prepare for cases of Coronavirus*. Retrieved from <http://theconversation.com/stepsnigeria-is-taking-to-prepare-for-cases-of-coronavirus-130704>
- JHU (Center for Systems Science and Engineering at Johns Hopkins University) (2022). *COVID-19 dashboard*. Retrieved from <https://github.com/CSSEGISandData/COVID-19>.

- Kandola, A. (2020). *Coronavirus causes: Origin and how it spreads*. Retrieved from <https://www.medicalnewstoday.com/articles/coronavirus-causes>
- Marbot, O. (2020). *Coronavirus Africa map: Which countries are most at risk?*. Retrieved from <https://www.theafricareport.com/23948/coronavirus-africa-which-countries-are-most-at-risk/>
- Ogo, E. P., Omosekejimi, A. F., Ebhonu, S. I. (2021). Usage of solar inverter technology as alternative energy source: A catalyst for round the clock electronic services in Nigerian university libraries. *Information Impact: Journal of Information and Knowledge Management*, 12(2), 113-125.
- Okoye, M., & Ugwuanyi, C. F. (2012). *Management of electronic resources by cataloguers in Nigerian federal university libraries*. Retrieved from https://www.researchgate.net/publication/280049226_Management_of_Electronic_Resources_by_Cataloguers_in_Nigerian_Federal_University_Libraries
- Omekwu, C.O., & Echezona, R.I. (2008). *Emerging challenges and opportunities for Nigerian libraries in a global information system*. Retrieved from https://scholar.google.com/citations?view_op=view_citation&hl=en&user=NRVAxz8AAAAJ&citation_for_view=NRVAxz8AAAAJ:9yKSN-GCB0IC
- Omosekejimi, A. F., Eyaufe, O. O., Nwobu, B. K., Nweke, A. C. (2019). Training and retraining: a catalyst for retooling 21st century librarians for effective information service delivery in academic libraries in south south, Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 10(1). Retrieved from <https://www.ajol.info/index.php/ijikm/article/view/188371>
- Omosekejimi, A. F., Ijiekhuamhen, O. P., Nweke, A. C. (2022). Preparing academic libraries for service delivery in the fourth Industrial revolution (4IR) era. Retrieved from <https://www.igi-global.com/chapter/preparing-academic-libraries-for-service-delivery-in-the-fourth-industrial-revolution-4ir-era/295199>
- Otiye, F. W., Bouaamri, A., Barát, A. H., & Kizsl, P. (2021). Emerging roles of libraries and librarians during and post COVID-19 pandemic: Challenges and opportunities. Retrieved from <https://www.igi-global.com/chapter/emerging-roles-of-libraries-and-librarians-during-and-post-covid-19-pandemic/284714>.
- Oyegunle, J. (2013). *Academic libraries in Nigeria*. Retrieved from <http://jdapo220.blogspot.com/2013/03/academic-libraries-in-nigeria.html>
- Qutab, S., Bhatti, R., & Ullah, F. S. (2014). Adoption of ICT's for library operations and services: A comparison of public and private university libraries of Pakistan. *Library Philosophy and Practice (e-journal)*. Paper 1106. Retrieved from <http://digitalcommons.unl.edu/libphilprac/1106>

International Association for Medical Assistance to Travellers (IAMAT), (2020). *Nigeria: Coronavirus COVID-19*. Retrieved from iamat.org/country/Nigeria/risk/coronaviruses.

World Health Organization (2020). *Coronavirus disease 2019 (COVID-19) situation report-37*. Retrieved from https://www.who.int/docs/defaultsource/coronaviruse/situation-reports/20200226-sitrep-37-covid-19.pdf?sfvrsn=2146841e_2

Zareef, M., Ahmad, P. (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>

Zhou, J. (2022). The role of libraries in distance learning during COVID-19. *Information Development*, 38(2), 227-238. Retrieved from <https://doi.org/10.1177/02666669211001502>