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This paper adopts the qualitative research design which comprised documentary evidence of experiences of ten public and private universities libraries in Ghana with regard to their resources, services, facilities and staff as well as impact on library users during the pandemic. Findings reveal the strict compliance of the COVID -19 protocols and sanitation practices, the increased use of online databases, social media interventions and virtual training among others. The different strategies adopted by university libraries in Ghana are worth sharing and lessons learned provide a unique opportunity for academic librarians to rethink their key roles and core values in supporting the teaching and learning of their institutions during this very challenging time and the future.

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## **Academic Libraries in Ghana and Their Strategies for Coping with the First Wave of the COVID-19 Pandemic**

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### **ABSTRACT**

In March 2020, institutions of higher education shut down in compliance with the directives of the President of Ghana to curb the spread of COVID-19. In July 2020, when the lockdown restrictions were eased, universities resumed teaching, learning, and research in order to continue the second semester of the 2020/2021 academic year. Universities and their libraries immediately adapted to online teaching and the delivery of services and resources to their patrons even though most of them were largely unprepared for this ‘new normal’ experience.

This paper adopts the qualitative research design which comprised documentary evidence of experiences of ten public and private universities libraries in Ghana with regard to their resources, services, facilities and staff as well as impact on library users during the pandemic. Findings reveal the strict compliance of the COVID -19 protocols and sanitation practices, the increased use of online databases, social media interventions and virtual training among others. The different strategies adopted by university libraries in Ghana are worth sharing and lessons learned provide a unique opportunity for academic librarians to rethink their key roles and core values in supporting the teaching and learning of their institutions during this very challenging time and the future.

**Keywords:** Academic Libraries, COVID-19 Pandemic, Coping Strategies, University Libraries, Ghana

### **INTRODUCTION**

Since January 2020, libraries around the world have been affected by the Coronavirus (COVID-19) pandemic. The myriad challenges that came along with COVID-19 have forced libraries to adapt and adopt technology as a viable and valuable option to ensure fulfilment of the educational needs of the stakeholders and in overcoming various obstacles in this pandemic time (Dadhe & Dubey, 2020). Indeed, libraries around the globe experienced the deferral of in-person services and loss of access to physical collections. Nevertheless, like most libraries in Africa and especially in Ghana, library services activities were predominantly provided using the face-to-face approach, and hence the provision of digital information services via online platforms since COVID-19 posed a number of challenges to library professionals and its patrons. In order to comply with institutions’ lockdowns, Ghanaian university libraries in March 2020, suspended all physical interactions with patrons as a result of COVID-19. This study therefore aims to investigate the role played by Ghanaian university libraries during the COVID-19 period in ensuring that services to patrons were not curtailed. In order to achieve

this aim, the researchers examined the services provided by the libraries: (1) during the lockdown, (2) in the course of resumption of onsite services, and (3) the impact of the COVID-19 on the library services activities.

## STUDY SETTING

As of January 2021 Ghana had seventy-four (74) accredited universities (NAB, 2021). These comprised of twelve (12) public and (61) private universities in Ghana. Nevertheless, ten (10) out of the 74 universities comprising 5 each from the public and private divisions were considered for the study. Public and private universities in Ghana are both higher education institutions in Ghana. However, whilst public universities are mainly funded by state governments, the private universities are mainly owned by an individual or a group of individuals and rely more heavily on student tuition fees, alumni donations, and endowments to fund their academic programs. The study primarily focused on the libraries of these universities. The choice of these university libraries was influenced by the fact that they were the oldest universities in the country and had more user communities and facilities than their counterparts. The categories, names, year of establishment and students' population as of January 2020 for the universities surveyed have been presented in Table 1.

**Table 1**

### *Universities Surveyed*

Category	Names	Year Established	Students Population
<b>Public</b>	University of Ghana (UG)	1948	40,000
	Kwame Nkrumah University of Science and Technology (KNUST)	1952	64,187
	University of Cape Coast (UCC)	1962	70,000
	University for Development Studies (UDS)	1992	20,000
	University of Education, Winneba (UEW)	1992	60,000
<b>Private</b>	Methodist University	2000	4,000
	Wisconsin University	1998	4,000
	Ashesi University	2002	1,253
	Presbyterian University	2003	2,500
	Central University	1998	7,000

## LITERATURE REVIEW

### **Libraries and COVID-19**

With the advent of the COVID-19 pandemic, libraries across the globe have seen a significant and on-going impact on services, spaces, and many other aspects of the profession, with many of them providing services entirely online and working remotely (Craft, 2020). Undoubtedly, the COVID-19 pandemic prevented many libraries from engaging in extensive planning activities in advance of the shift to remote work. The major shift was the transition from in-person to remote work, with potential implications for remote workers and their supervisors (Craft, 2020), coupled with the main challenge from the lack of infrastructure and devices for accessing resources as well as copyright issues associated with the digitization of textbooks (Tamaro, 2020). Nevertheless, amid the challenges of COVID-19, libraries have been

exploring the collection of potential e-resources and providing remote access to those which may be of interest to the fraternity of scholars in support of academic and research activities (Dadhe & Dubey, 2020).

All the same, the impact of the COVID -19 pandemic has been much felt among libraries in Africa. Indeed, developed countries have regularly utilized online platforms to meet the information needs of users (Fernández-Ramos, 2016; Gonzales, 2014), and hence continued to render online services to their users during lockdowns. Essentially, in Africa, the spread of the COVID-19 virus has, to a large extent, affected most African academic libraries' procedures for safeguarding a collection of significant and dependable information in order to give individuals trusted and solid information for decision making (Kasa & Yusuf, 2020). Kasa and Yusuf (2020) opine that COVID-19 blindsided academic libraries with little time to plan for the safety of patrons and employees. All the same, during the challenging time when physical classes were suspended and physical libraries closed, libraries in Africa did not come to a stand-still, but provided library services using varied online platforms. For instance in Nigeria (Ladan, Haruna and Madu, 2020) and Kenya (Mugo & Wachira, 2020) different kinds of library services were provided and accessed using e-resources and online platforms. Regardless, quite a number of African academic libraries continued to provide access to physical resources amidst the COVID-19, since library services were modelled in such a way that users have to be on campus to utilize them (Ifijeh and Yusuf, 2020).

Nonetheless, the outbreak of the COVID-19 pandemic introduced some form of best practices among libraries around the world and especially in the developing countries. Libraries began to design responsive library websites, adopted the use of blended librarianship model and use of social networks (Ifijeh & Yusuf, 2020). As Kasa and Yusuf (2020) revealed, during the COVID-19 pandemic, academic libraries learned and adopted the dissemination of information through interactive online services such as social media to provide real-time services to patrons. In summary, even though a distraction, the COVID-19 pandemic provided a unique opportunity for academic librarians to rethink their key roles and core values in supporting the teaching and learning activities of their institutions. This suggests that COVID-19 has reformed the traditional ways of providing access to information in many ways. Consequently, academic libraries are now providing access to more online services to their users, which ensures that users get access to needed materials no matter their location.

## **MATERIALS AND METHODS**

This study is based on a review of the literature, documentary evidence and statistical data on COVID-19 experiences from the selected university libraries studied. Library heads from the 10 institutions involved were contacted for available reports, and write-ups on their coping strategies during the full-closure and partial reopening of the universities. The heads had to respond to three main themes, namely: activities of the libraries when the libraries were closed in March 2020, their preparations towards the reopening in July 2020 and when the libraries resumed face-face services to patrons. Data gathered from the write-ups and reports were analysed using comparisons and situational analysis techniques with respect to the libraries under lock down, post pandemic re-opening of libraries, and the impact on library services post-COVID-19. For the sake of anonymity, the selected universities were represented by alphanumeric codes. The public universities are represented by (PU1, PU2, PU3, PU4 and PU5) whilst the private universities are denoted by (PR1, PR2, PR3, PR4, and PR5).

## RESULTS

### Activities During Lockdown – March, 2020

While all selected Universities were shut down and did not allow users into the physical libraries, these libraries continued to provide access to digital resources and services, and offered virtual training programs to their patrons using digital platforms such as email, WhatsApp, social media and Zoom. More specifically, regarding the provision of digital services and access to its resources, analysis of the documents from the university libraries pointed out some of the activities of the libraries during the lockdown period.

Furthermore, documents analysed showed that another major activity undertaken by all the libraries was online training. Libraries either organized training on available digital resources and/or engaged their publishers to provide webinars. Library orientation and information literacy classes did not also come to a stand-still during the lock down, but were offered using varied online platforms to provide trainings and orientations for its staff and patrons. The use of social media platforms such as Facebook and Twitter were observed as prominent platforms for the provision of digital services, whilst Zoom and Microsoft Teams featured as the most used training platforms in all the libraries during the lockdown period.

Indeed, the use of technology such as social media has been identified as a tool for facilitating library services provision to meet a wide range of users in real time, no matter their location (Mensah & Onyancha, 2021). This is not surprising because the use of technology facilitates the work of the university libraries to meet a wide range of users' needs, no matter their location. Also, the use of these technologies is part of the current trends of librarianship and many libraries are adopting them in order to maintain their eminent positions as providers of information. The finding is consistent with that of Ifijeh and Yusuf (2020) who investigated the 'Covid-19 pandemic and the future of Nigeria's university system'. They indicated that most libraries that designed responsive library websites adopted the use of a blended librarianship model and use social networks to support users. This means that libraries used technology to support users' needs when they were not physical open. The use of these technologies, according to Ladan, Haruna, and Madu (2020), facilitated the dissemination of information through interactive online services during the "new normal". It is clear from the findings that the libraries broader use of technology and software platforms allowed them to serve their users better than they would have without those tools.

Additionally, the use of these technologies is part of the current trends of librarianship and many libraries are adopting them so that they will not be out of business. The finding is consistent with that of Ifijeh and Yusuf (2020) who investigated the 'Covid-19 pandemic and the future of Nigeria's university system'. Table 2 provides a summary of activities of each of the libraries during lockdown and the mediums used for the provision of these services.

**Table 2***Library Services Activities and Medium of Provision During Lockdown*

Library	Services/Trainings Provided								Mediums						
	Services						Trainings		For Services provision					For trainings	
	Services Announcement	Patrons/ Staff Interactions	Remote Access to E-resources	Electronic Scanning	On-Line Chat	Free Online Textbooks	Virtual Orientation	Virtual Webinar Seminars & workshop	Email	Remote X & Proxy	Library Website	Social media: Facebook, twitter and WhatsApp	Phone calls	Zoom	Microsoft Teams.
<b>PU1</b>	√	√	√	√	√	<b>X</b>	√	√	√	√	√	√	√	√	√
<b>PU2</b>	√	√	<b>X</b>	<b>X</b>	<b>X</b>	√	√	√	√	<b>X</b>	√	√	√	√	<b>X</b>
<b>PU3</b>	√	√		<b>X</b>	√	√	<b>X</b>	√	√	√	√	√	√	√	√
<b>PU4</b>	√	√	<b>X</b>	√	√	<b>X</b>	<b>X</b>	√	<b>X</b>	√	√	√	<b>X</b>	√	<b>X</b>
<b>PU5</b>	√	√		<b>X</b>	<b>X</b>	<b>X</b>	√	√	√	√	√	√	<b>X</b>	√	√
<b>PR1</b>	√	√	<b>X</b>	<b>X</b>	√	<b>X</b>	√	<b>X</b>	<b>X</b>	√	√	√	√	√	<b>X</b>
<b>PR2</b>	√	√	√	<b>X</b>	√	√	√	√	√	<b>X</b>	√	√	<b>X</b>	√	<b>X</b>
<b>PR3</b>	√	√	√	<b>X</b>	<b>X</b>	√	√	√	√	√	√	√	<b>X</b>	√	<b>X</b>
<b>PR4</b>	√	√	√	<b>X</b>	√	<b>X</b>	√	√	<b>X</b>	<b>X</b>	√	√	<b>X</b>	√	√
<b>PR5</b>	√	√	√	√	√	√	√	√	<b>X</b>	√	√	√	√	√	<b>X</b>

Note: √=Service/trainings provided/medium used; **X**= Service/trainings not provided

## Resumption of Onsite Services

With the exception of Library F1, all selected libraries resumed onsite services in June 2020.

This session presents the findings based on the documentary analysis of all the other nine selected libraries on their activities when they resumed onsite services. The section presents information on preparations to ensure safe reopening of the libraries, and some changes in routine library activities. On provisions put in place by the libraries to ensure safe reopening, analysis of the documents from the libraries indicated that nine (9) of the libraries had made preparations to ensure safe reopening of their libraries. These included adherence to safety protocols, and COVID-19 health education.

To begin with, a very important step adopted by the libraries was health education on COVID-19 to educate library staff about its symptoms and measures to take to avoid contracting the virus. This was necessary as staff were scared of interacting with patrons. As shown in the documents analysis, while some of the libraries brought in medical practitioners to educate and eliminate all misconception about the virus (PU3), others (PU4) relied on credible information from the WHO, the Center for Disease Control (CDC), USA, and the Director of University Health Services.

Relative to safety protocols, nine libraries reported disinfection of their space to curb the spread of the virus. Safety measures undertaken include: provision of basic personal protective equipment such as face masks for staff, hand washing and sanitising equipment, temperature checking equipment, social distancing measures, notices/posters displayed at vantage points in the library, and contact details to ensure contact tracking in case of a COVID-19 case. These were well captured in the documentary presented to the researchers from the universities surveyed. For instance, on hand-washing activities were well captured in documents from two of the libraries as follows:

“Protocols such as washing of hands, (and) checking of temperatures were observed at the main entrance of the University’s quadrangle where the library is located. Sanitizers were placed at vantage points for use by staff and the few students who tricked in at the time. Hand gloves were also given to staff to wear to prevent direct contact with surfaces.” (*Extract from PR2 COVID-19 Experience Document*).

“Thermometer guns have also been acquired and are in active use by the security at the Library. Staff and users are required to check their temperature daily, before allowed into the Library premises” (*Extract from PU5 Covid-19 Experience Document*)

Besides, a new vocabulary which became popular during the Covid-19 period was ‘social distancing’. This signifies the physical distancing of people usually between one metre to three metres to avoid close contact with others or with objects. Summary of social distancing activities in the libraries were clearly stated in the documents from Libraries PR2, PU1, PU5

“Sitting capacity was reduced from 200 to 50 to ensure social distancing” (*Extract from PR2 Covid-19 Experience Document*)

“Seating arrangements have been spaced at a distance of at least 1 meter. Seats have been tagged as either reserved or ‘please do not sit here’” (*Extract from PU1 Covid-19 Experience Document*)

“The seating arrangement reflecting social distancing has resulted in a reduced capacity for student numbers and as such, providing more spaces is essential. The Library has initiated

the creation of additional open, reading spaces to improve the social distancing among users.”  
*(Extract from PU5 Covid-19 Experience Document)*

Additionally, upon service resumption, contact tracing was another activity which was recommended by the Ghana Health Service which mandated institutions to keep track of people who used their facilities and provide their contact should there be reports of the pandemic during specific periods. Documents from all nine libraries revealed that contact tracing activities were in the form of taking some demographic details of staff and patrons who visited the libraries on a daily basis. Such information typically included:

1. Date of visit/ reporting to the library;
2. Name of staff/student;
3. Staff/Student ID;
4. Time of entry;
5. Time of leaving;
6. Recorded temperature;
7. Telephone number; and
8. Staff/Student signature.

Finally, as part of their safety protocol measures, the academic libraries studied used different and interesting posters, placed at vantage points with inscriptions to notify their staff and users on the dos and don'ts of the libraries. Posters mainly announced one theme centered on- “Wearing of face masks”.

### **Impact of the COVID-19 on Library Services**

Given that all academic libraries surveyed had indicated the continuous provision of library services to its patrons during COVID-19 outbreak and in lockdown, only three of the libraries were able to provide information and statistics regarding the impact of the COVID-19 on the library services and use. All efforts by the researchers to obtain such information yielded no results.

A possible reason could be that some academic libraries thought it was too early for an effective assessment on the impact of the COVID-19 on their services. As such in this section, the results from only three out of the ten libraries are presented. Information presented in this section is mainly from generated statistics made available to the researchers from the three university libraries.

These three libraries included: PU1, PU5 and PR1. Analysis of the statistics received from all three libraries indicated a high level of use of the libraries e-resources, especially during the lockdown period, with a subsequent decline in their use once onsite services resumed. Examples of such services used by the library patrons included; the chat with the librarian services, off campus access, and e-resources service to patrons. This was obvious since users could not patronize the libraries physically but were also required to fulfil their academic objectives.

### **Ask-a-Librarian Platform**

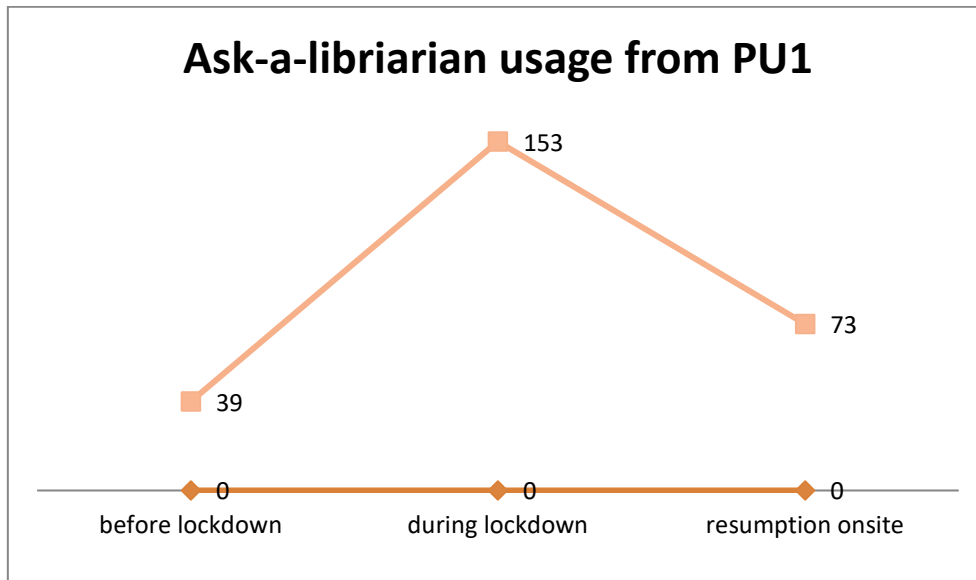
Popularly referred to as the “ask a Librarian”, the “chat a librarian” services basically provides online, on-request assistance to library patrons from the library website. This system allows



library patrons to get immediate help to their information needs no matter where they are. As presented in Figures 1, 2 and 3, usage statistics from all the three libraries suggests that COVID-19 had an impact on the usage of the online Ask-a-Librarian platforms of the academic libraries. Given that this service was used across the three periods, the highest level of impact and use was experienced especially at the periods when the libraries were under lockdown.

**Figure 1**

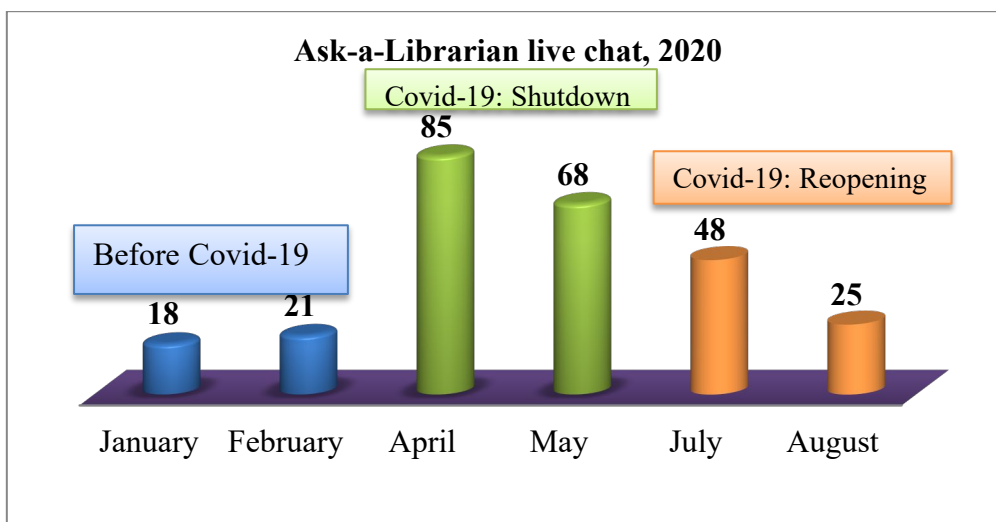
*Ask-a-Librarian Usage Statistic from PU1*



Source: Ask-a-Librarian of Library PU1 (2020)

**Figure 2**

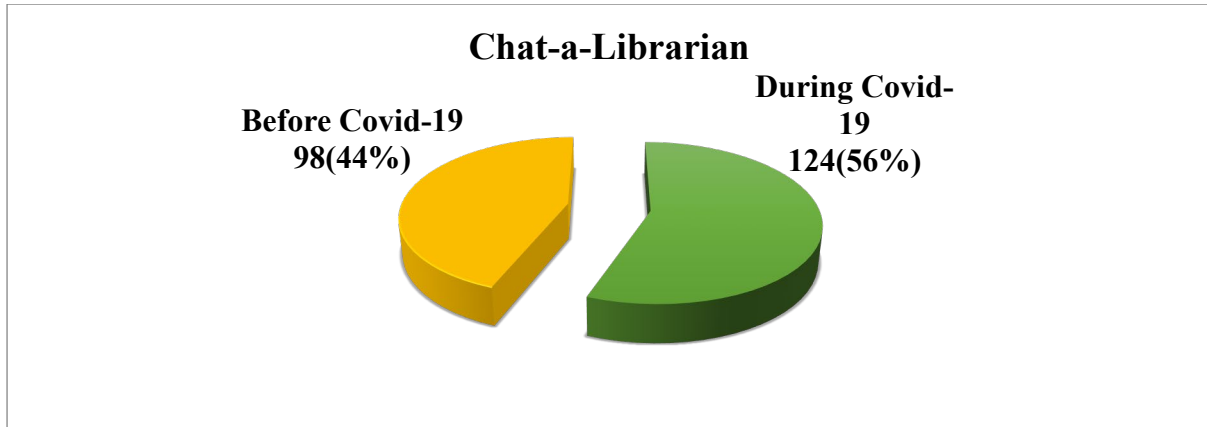
*Usage Statistics of Library PU5 Before, During and After COVID-19*



Source: Ask-a-Librarian of Library PU5 (2020)

**Figure 3**

*Usage Statistics of Library PRI Before and After COVID-19*



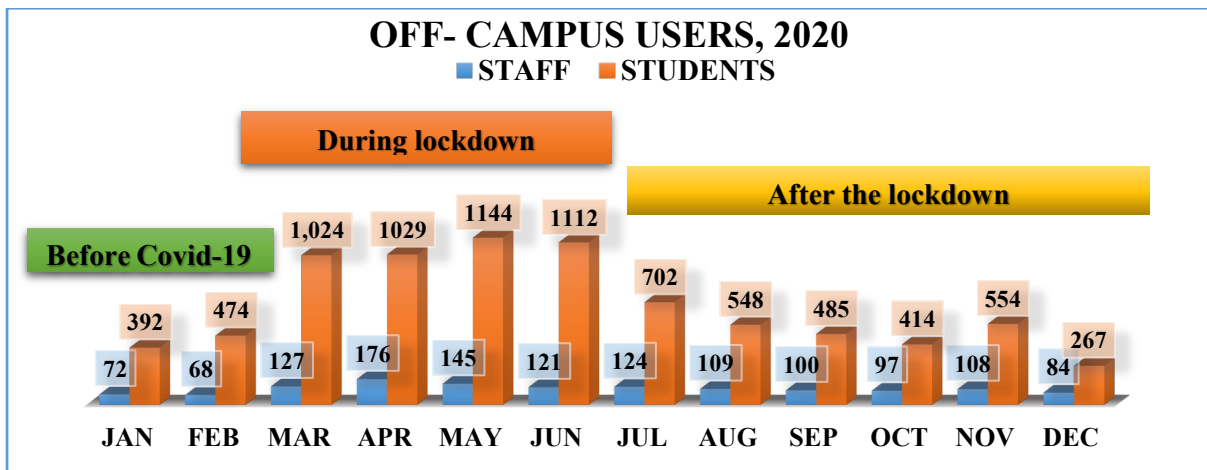
Source: Ask-a-Librarian of Library PRI

**Remote Access/Off-Campus Access**

Remote access, or Off-campus access, in simple terms permits library users to have access to an institution’s library’s electronic resources when not connected to the institutions’ network, no matter their location for their academic work. Statistics obtained and presented in **Figures 4, 5, 6, 7, and 8** indicates that patrons of the academic libraries used off-campus access before COVID-19 with a rapid increase in use during the lockdown. Based on the statistics received, it was observed that the increased use of the off-campus access resulted in an increase in the use of the libraries electronic resources such as e-books, and e- journals.

**Figure 4:**

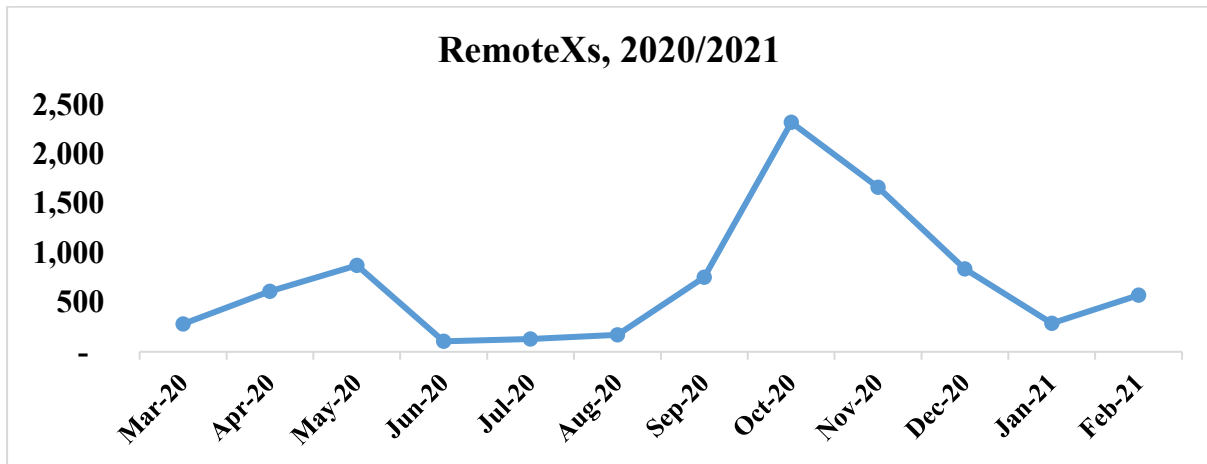
*Off-Campus Access of Library A1 Amidst COVID-19*



Source: EZproxy usage Library PU1 2020

**Figure 5**

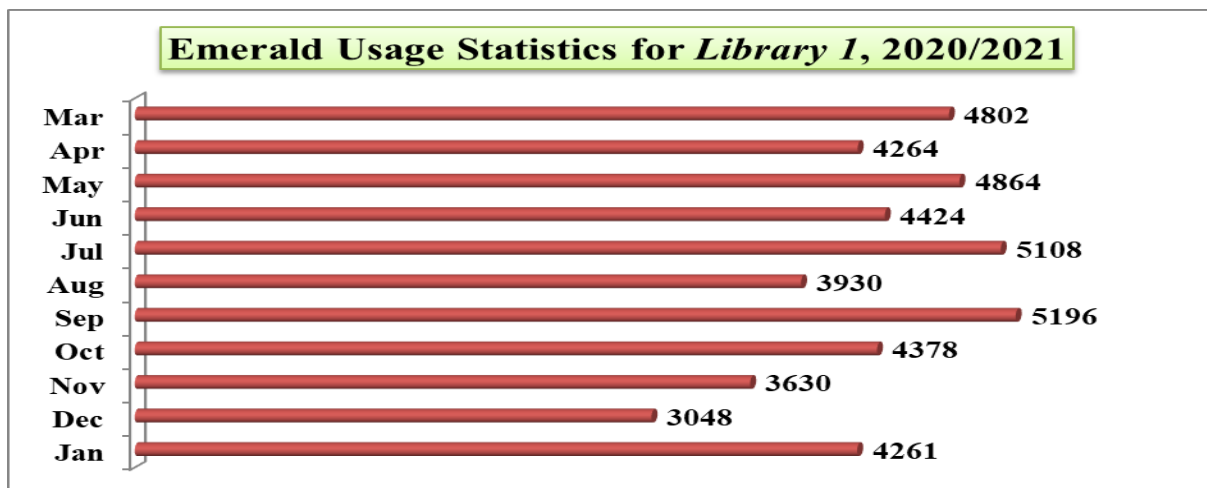
*Remote Access Usage Statistics of Library FI Amidst COVID-19*

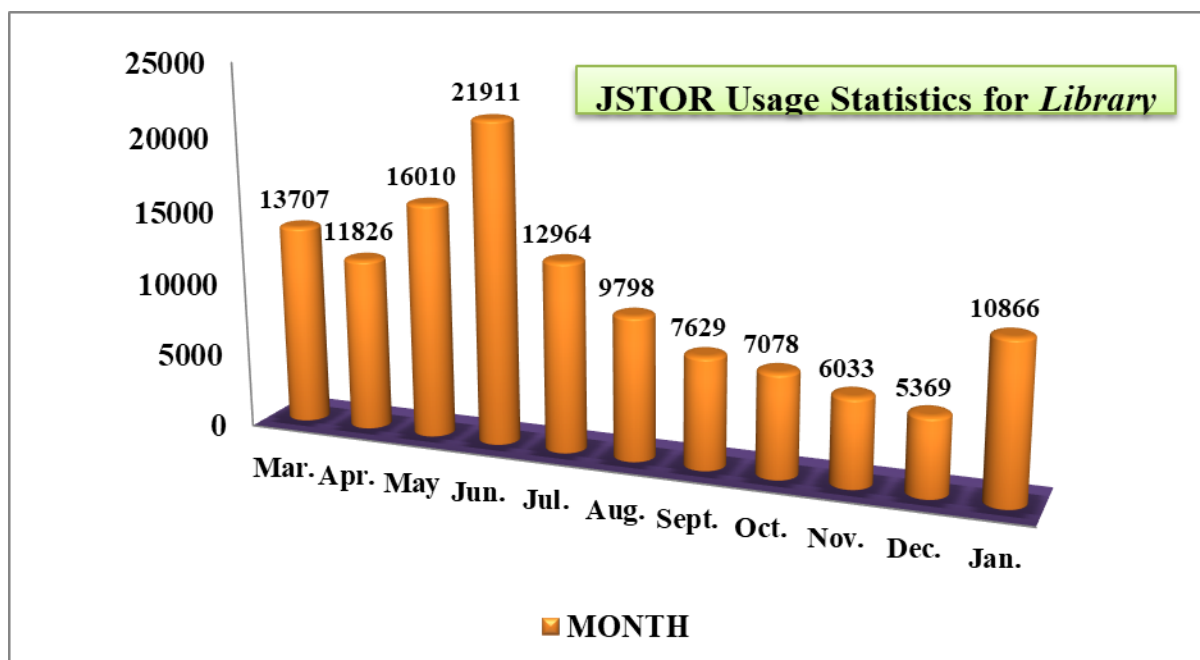


Source: RemoteXs usage Library PU5

**Figure 6**

*Emerald Usage Statistics of Library PRI*



**Figure 7***JSTOR Usage Statistics of Library PUI*

## DISCUSSION OF FINDINGS

### Libraries Under Lockdown

Library services are provided towards meeting the information needs of the user community. These services are either in print, electronic, or digital forms. Academic libraries must employ various information sources towards meeting users' needs, both in-person and electronically. The COVID-19 pandemic led to a suspension of in-person services for remote services. The findings revealed that some of the libraries used remote access to effectively provide online services to meet the information needs of their patrons. This can be attributed to the fact that these libraries were shut down during COVID-19 and did not allow users into the physical libraries. Similar findings were reported by Ladan, Haruna and Madu (2020) in a study in Nigeria. They indicated that during this challenging time, physical classes were suspended, and physical libraries were closed.

Again, the findings are in line with the works of Donkor, Yeboah and Afrane (2020) who reported that the Balme Library encouraged patrons to use the library's e-resources and other online platforms often when there is no need to physically use the library. These e-resources include off-campus access to the library's resources no matter your locality. It is clear from the findings that the use of online services helped the university libraries to continue providing resources to meet users' needs. These findings are inconsistent with the work of Ifijeh and Yusuf (2020) who reported on the COVID-19 pandemic and the future of Nigeria's university system'. They noted that most library services are modelled in such a way that users must be on campus to utilize them. The inconsistency may be as a result of the inability of the library to plan ahead of any contingencies. This would have helped the library to provide in-person services in case there is a shutdown of the physical library. Though it is obvious that the suspension of in-person services affected the activities of libraries, some libraries continue to provide online services to meet users' needs.

### **Use of Online Platforms**

Online platforms were an important information source during the COVID-19 pandemic. The use of online platforms contributes to the provision of library resources without limitations. The finding revealed that some of the libraries used the online chat services (Ask-a-Librarian) to frequently answer users' questions. Additionally, online platforms such as Zoom, email, and social media platform such as WhatsApp were also used to provide services to users. It was evident from the findings that some of the university libraries used various online platforms to engage students and staff in meeting their information needs. It can also be seen that library staff, faculty and students' views of the online platform was positive during the time of the pandemic. The finding agrees with that of Donkor, Yeboah and Afrane (2020) on the use of Ask-a-Librarian chat services by users in meeting their users' information needs. Similarly, scholars such as Fernández-Ramos (2016) and Gonzales (2014) agreed that libraries in developing countries utilized online platforms to meet the information needs of users. It can be established that even though COVID-19 did not give the time and resources for libraries to plan, some of the libraries did well by using different online platforms to meet users' needs. This finding disagreed with that of Allcott, Gentzkow, and Yu (2019), as cited in Ladan, Haruna, and Madu (2020); Chisita and Chizoma (2021). They indicated that online platform such as social media led to the spread of fake news on society and on people's decisions and behaviour. This means the institution must set rules towards the proper use of the online platforms, thereby ensuring effectiveness and efficiency in service delivery.

### **Provision of Free Academic Materials**

The libraries provide unhindered access to information and information services that satisfy the clientele's actual and potential information needs. During the pandemic, libraries were working assiduously to provide access to their collection to library users (Dadhe, & Dubey, 2020). The findings revealed that services such as textbooks were freely made available on ScienceDirect, Elsevier's free health and medical research on the novel coronavirus (SARS-CoV-2) and COVID-19 and 90-days access to SAGE videos as well as the use of Google Drive to share information of open access books to faculty. This can be attributed to the fact that the availability of free information during the pandemic was very important to safeguard the lives of users. The findings supports that of the University of Sussex Library (2020), which provided free academic materials from veteran publishers during the lockdown.

These findings further supports that of Dadhe, and Dubey (2020) who examined 'library services provided during COVID-19 Pandemic: Content Analysis of Websites of Premier Technological Institutions of India'. They stated that during uncertain and difficult times, some publishers are providing expanded access to electronic resources including electronic books, journals and databases among others for a limited period during this pandemic. According to Dadhe, and Dubey (2020), the main purpose of free academic materials is to facilitate visibility of these options of materials available to users. It is obvious from the finding that the provision of free academic materials helped to meet users' information needs in this difficult time where libraries lack the needed funds to procure various materials.

### **Effect on Work Force**

The finding revealed that COVID-19 had a negative impact on staff during the lockdown. This can be attributed to the fact that the library suspended all in-person services in order to protect the safety of both users and staff from contracting the COVID-19 virus. Some of the institutions were incapable of paying their staff because most staff arguably worked less hours and from

home. The finding supports the works of Craft (2020); Tammaro (2020), who indicated that many staff worked from home during COVID-19 pandemic. Some of these staff worked from home in order to support their institutions, others were in the house doing nothing. Also, after the lockdown, there was an introduction of a shift system to allow staff to work a minimum number of hours based on government's directive. According to Donkor, Yeboah and Afrane (2020), some academic libraries in Ghana put in place a series of strategies (health talks) to protect and remove fear from the library staff. A further step was taken to limit the number of sections of the library open to users, since the use of certain facilities by the public could cause contamination and increase the risk of the spread of the virus to staff (Dadhe, & Dubey, 2020). It can be concluded from the finding that the series of steps taken by management helped to ensure the smooth running of the library.

### **Developing Information Literacy Skills of Students**

Information literacy is defined as the ability to find and use information, including identifying the sources and evaluating the information in meeting users' needs. Information literacy skills empower individuals with critical skills that help them to become independent lifelong learners (Ranaweera, 2008). The findings showed that library orientation and information literacy classes did not stop during the lockdown. With technological equipment, some libraries were able to fulfil an important aspect of library services such as training library users. It can be established from the findings that the library still provided information literacy, but it is only the form that changed. Information literacy skills were done virtually for students and faculty members. This finding agreed with the finding of Martzoukou (2020) on "Maddie is online": an educational video cartoon series on digital literacy and resilience for children. He indicated that libraries are still assisting students to develop information, digital and media literacy skills during the COVID-19 pandemic. These information literacy skills, according to Martzoukou (2020), helped students to be in a position to independently select, access and use accurate, reliable, trustworthy and credible sources of information, not only for their studies but also for their wellbeing. It is obvious from the finding that a series of information literacy skills were organised online for students for the purpose of helping them to use the valuable resources and facilities available in the libraries.

## **LIMITATIONS AND AREAS FOR FURTHER RESEARCH**

Notwithstanding the contributions of the study, it is important to acknowledge study limitations which can be considered for future studies. The first limitation is concerned with the generalisability of the study findings. This study intended to study 10 academic libraries comprising of five public universities and five private universities. However, at the end of the data collection process, the researchers' observed that only three of these libraries provided the complete and required information relevant to the study objectives. A possible reason could be that the three libraries at the time of data collection had appreciable information technology infrastructure and hence were able to provide to the researchers the statistics required. Hence, there are concerns regarding the applicability of the results to the entire study population of ten academic libraries as well as to other library segments such as college libraries, since such generalisation may have limitations. In order to have a better explanation on the coping strategies of academic libraries during and after the COVID-19 pandemic, it would be interesting to extend this study to a wider geographical scope or to carry out a cross-library comparative study to overcome this limitation.

Besides, this study was largely based on a review of the literature, document evidence and statistical data on COVID-19 experiences from the selected university libraries in Ghana. However, future research studies could consider a field research to explore any other important constructs that fit in the context and can explain the experiences of academic libraries pre, during and post the COVID-19 pandemic.

## CONCLUSION

Academic libraries play a cardinal role in providing access to resources and services in meeting user's information needs. The emergence of the COVID-19 pandemic has had a great impact on academic library services. Thus, academic libraries were forced to adopt technology as a viable and valuable option to ensure the fulfilment of the informational needs of patrons. Existing technological infrastructure, which had not been very often optimized or utilised, now became more essential tools for reaching out to patrons. Librarians learned to use the Learning Management Systems, maximised the use of chat with a librarian system, increased use of social networking tools and promoted the use of Remote access (Ezproxy, RemoteXs) to patrons. Indeed, patrons were also phenomenal in accepting this 'new normal' to facilitate teaching, research and learning. The increase in instructional sessions to individuals or groups was a major boost for most librarians during the COVID-19 pandemic as it brought the latter closer to its patrons. The different strategies librarians used to cope during the pandemic has really given them insight into how to manage whether the library is opened or closed. The lessons learned have informed us on how to successfully proceed in the advent of other waves of COVID or a major crisis.

## References

- Bruni, S. (2020). Formazione professionale al tempo del Covid. *Bibelot*, 26(1), 1–3.
- Craft, A. R. (2020). Remote work in library technical services: Connecting historical perspectives to realities of the developing COVID-19 pandemic. *Serials Review*, 46(3), 227–231. <https://doi.org/10.1080/00987913.2020.1806658>
- Chisita, C. T., & Chizoma, U. S. (2021). Rethinking academic library space amidst the COVID-19 pandemic in South Africa: preparing for the future. *Information Discovery and Delivery*, 49(2), 105–113. <https://doi.org/10.1108/IDD-07-2020-0087>
- Dadhe, P. P., & Dubey, M. N. (2020). Library services provided during COVID-19 pandemic: Content analysis of websites of premier technological institutions of India. <https://digitalcommons.unl.edu/libphilprac/4445/>
- Dadzie, P. S., & Van Der Walt, T. (2015). Digitising university libraries in Ghana: How technology is facilitating to digital content and service content and services. *Mousaion*, 33(3), 95–114.
- Donkor, A. B., Yeboah, F., & Afrane, D. A. (2021). *Rendering library services amid the Corona Virus pandemic: A case of the Balme Library of the University of Ghana*. Retrieved February 21, 2021, from [https://www.uibk.ac.at/ulb/aktuelles-veranstaltungen/2020/iatul-2020\\_abstracts.pdf](https://www.uibk.ac.at/ulb/aktuelles-veranstaltungen/2020/iatul-2020_abstracts.pdf)

- Fernández-Ramos, A. (2019). Online information literacy instruction in Mexican university libraries: The librarians' point of view. *The Journal of Academic Librarianship*, 45(3), 242–251. <https://doi.org/10.1016/j.acalib.2019.03.008>
- Ghana Health Service. (2020). *Covid-19: Ghana's outbreak response management updates*. Retrieved February 21, 2021, from <https://www.ghanahealthservice.org/covid19/archive.php>
- Gonzales, B. M. (2014). Online tutorials and effective information literacy instruction for distance learners. *Journal of Library & Information Services in Distance Learning*, 8(1-2), 45–55. <https://doi.org/10.1080/1533290X.2014.898011>.
- 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), 1–8. <https://doi.org/10.1016/j.acalib.2020.102226>
- Kasa, M. G., & Yusuf, A. (2020). Experience of an academic library during the COVID-19 pandemic. *Library Philosophy and Practice*, 1. Retrieved February 22, 2021, from <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=8423&context=libphilprac>
- Ladan, A., Haruna, B., & Madu, U. A. (2020). COVID-19 pandemic and social media news in Nigeria: The role of libraries and library associations in information dissemination. *International Journal of Innovation and Research in Educational Sciences*, 7(2), 2349–5219
- Martzoukou, K. (2020). “Maddie is online”: An educational video cartoon series on digital literacy and resilience for children. *Journal of Research in Innovative Teaching & Learning, ahead-of-print* (ahead-of-print). <https://doi.org/10.1108/JRIT-06-2020-0031>
- Mensah, M., & Onyanha, O. B. (2021). Building and enhancing library services: Patrons' awareness of, and engagement with social media in academic libraries in Ghana. *Journal of Librarianship and Information Science*, 1–18. <https://doi.org/10.1177/09610006211036738>
- Mugo, K., Odera, N., & Wachira, M. (2020). Surveying the impact of COVID-19 on Africa's higher education and research sector. *The Africa Portal*. Retrieved February 26, 2021, from <https://www.africaportal.org/features/surveying-impact-covid-19-africas-higher-education-and-research-sectors/>
- National Accreditation Board (2020). Retrieved February 26, 2021, from <https://nab.gov.gh/index.php/about-us/board>
- Ranaweera, P. (2008). Importance of information literacy skills for an information literate society. <http://eprints.rclis.org/11956>
- Tamaro, A. M. (2020). COVID-19 and libraries in Italy. *International Information & Library Review*, 52(3), 216–220.
- University of Ghana (2018). *Re-opening of the Balme Library*. Retrieved February 21, 2021, from <https://www.ug.edu.gh/announcements/re-opening-balme-library>
- University of Sussex Library Library FAQs. (2020). Retrieved February 26, 2021, from <https://www.sussex.ac.uk/library/>
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