# COVID - 19 Pandemic and Readiness on Provision of Library Services in Selected Academic Libraries, in Dares Salaam Region, Tanzania

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#### Abstract

The outbreak of the COVID-19 pandemic in the world brought many changes in the way libraries provided services to users. Most academic libraries worldwide have placed a strong emphasis on using online services to combat the spread of the pandemic. This study sets out to examine the readiness of academic libraries in Tanzania to provide services to their patrons during the period of the COVID-19 pandemic and determine their working practices and strategies applied to overcome the spread of the pandemic. The study used a quantitative and qualitative approach to collecting data through a structured questionnaire and semi-structured interviews with users and librarians in the surveyed academic libraries. The findings showed that libraries restored their web pages, reassigned resources, and planned robust online services for their users. Library staff worked from home, and there was a sense of overburden because of the lack of connectivity and other formal working policies addressing the new working routines. University librarians believed that the digital divide resulted from a lack of digital literacy skills, and slow internet speed was the most significant barrier to their transition from physical to online mode, resulting in less use of the library's online resources and web portals. Libraries see their individual and collective roles in societal and educational dimensions during these uncertain times. The study recommends that libraries should reassess their facilities, resources, strategies, and services in order to be capable of playing a vital role in supporting their users to access information based on their information needs.

Keywords: COVID - 19; Academic libraries; Provision of Library Services; Pandemic; Library Resource.

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### INTRODUCTION

The rapid spread of the Corona Virus Disease (COVID-19), which the World Health Organization has classified as a pandemic, has been a threat to the entire world since December 2019. It has had an impact on a lot of organizations and

people around the world. Almost every country in the world has closed its schools and universities. Many students around the world, especially those in developing countries, were impacted by this tragic event in terms of their academic activities.

Most academic libraries around the world reported switching to working online during the COVID-19 pandemic, offering remote access to free electronic materials and support services (China Agricultural University Library, 2020). Digital forms have been created from print assets (Guo et al. 2020). This indicates that university libraries supported their patrons even in the midst of the pandemic. Others, however, were not ready for this task due to a lack of funding for the necessary equipment to carry out digitalization, a lack of technological expertise among librarians and users, and a lack of strategies to deal with this circumstance (Sichuan University Library, 2020). As a result, the library remained closed and unavailable online during the lockdown.

Several libraries in Africa, including those in South Africa, Nigeria, Kenya, Tanzania, and other countries, employed various methods to distribute regarding updates COVID-19 prevention. According to Chelsa's (2020) report on the COVID-19 survey, the implementation of online and remote teaching and learning by universities in South Africa was prompted by this pandemic. Online services and library resources are promoted through social media channels including Libchat, WhatsApp, Blackboard, Twitter, and Instagram. In Tanzania, Mnzava and Katabalwa (2021) looked at the library websites and discovered that only a small number of them were accessible. This indicates that the majority of library websites were not updated and had no information about the COVID-19 trend. This shows that users who rely on the library's websites to access information was unsuccessful in doing so. As a result, information accessed by users through library websites did not satisfy them.

In fact, the outbreak of COVID-19 brought changes in the ways used to access library services in universities, from personal attendance and face-to-face work to remote working and virtual attendance without prior preparation (performance protocols, infrastructure, and professional skills). Mnzava and Katabalwa (2021) reported that during the COVID-19 outbreak, most library websites in Tanzania were not updating their information, even though some libraries already had an online access system in place. Consequently, some services provided by the libraries were not reported on the library website. This is greatly attributed to a lack of readiness to temporarily change their roles,

which makes it unclear how libraries are prepared to offer library services throughout the COVID-19 pandemic. It should be noted that the academic library is a crucial place for researchers, lecturers, and students to access information for both printed and electronic resources. Library services are used for research, teaching, and learning at any university. Therefore, this study intends to assess the readiness of academic libraries in Tanzania to provide library services during the COVID-19 pandemic. Specifically, this study aims to:

- a) Examine the preparedness and strategies used to provide library services during the period of COVID-19 pandemic working environment.
- b) Find out the challenges that hindered the surveyed libraries from provision of library services during COVID-19 pandemic.

### LITERATURE REVIEW

According to Hart (2006), "readiness" refers to capacity for physical facilities, infrastructure, and subjective attributes such as staff attitude and beliefs. Contrary to Hart's definition, Edward Thorndike's theory defines readinessas a series or a set of responses that can be linked together in order to achieve a goal (Ribbers& Waringa, 2015). Thorndike's added that the process of readiness involves recognizing the need to change, weighing the costs and benefits, and, when benefits outweigh costs, planning for change (Dalton & Gottlieb, 2003). The desire to change and take action determines clients' degree of readiness (Dalton & Gottlieb, 2003). During the COVID-19 pandemic, most academic libraries provided their services using different techniques. Abudaiwi& Alajmi (2020) demonstrate that while New York City's libraries were physically closed, they provided remote service. They assist their communities by establishing a virtual dialogue with their clients in order to offer comfort and ease tension during those difficult times by ensuring that the librarians continue to listen to, talk to, and support them and their families, thus providing comfort and social support. This shows that the online library serves the librarians as the main controller in providing information resources and databases to help distance learners in their research or information seeking in order to uphold the restriction of social distance.

Dadhe et al. (2020) conducted research on "Library Services Provided During the COVID-19 Pandemic in India." The study shows that online

learning is the only method for resolving these issues because of social distance constraints. Libraries utilize digital resources and offer remote access to their users who are interested. They also offer access to help with academic and research activities. Additionally, hand sanitizer is accessible at service counters and at various locations around the library buildings, and users can access other COVID-19-related resources.

The collections, services, users, and personnel were all impacted by the situation with the closed and reopened libraries. It's challenged the ways academic libraries have traditionally operated. Despite frames and platform switching, Nwosu and Asuzu (2021) observed that the COVID-19 pandemic imposed a lack of physical engagement with the users while virtual means of provision of information services emerged, such as Microsoft Teams, library platforms, e-resources, WebEx, etc.

According to Nwokocha (1998), the absence of proper social facilities for library workers is another barrier to the development of the library, in addition to the lack of facilities in the state capitals. Additionally, Nigerian libraries and those in other African nations are constrained by poor patronage, a near total lack of current materials, inadequately qualified staff, and an insufficient budget.

Other problems include an insufficient budget, a lack of clear and consistent library policy, the attitude of library management, and a failure to meet ICT requirements (Amaechi & Eke, 2018). Nigeria would find it difficult, given the destruction COVID-19 has caused and the lack of ICT in the country's libraries, to support digital libraries. However, in Nigeria, with little finance, a bad Internet connection, and a lack of power supply due to the country's coronavirus outbreak, it is still difficult to provide people with efficient library services (Ali & Gatiti 2020).

#### Theoretical Framework

This study was guided by "a theory of organizational readiness for change." The theory of organizational readiness for change is a multi-level construction of change. Management experts like Weiner (2009) have emphasized the importance of building organizational readiness for change and recommended various strategies to create organizational readiness for change with the main determinants of implementation capability: task demands, resource availability, and situational factors. Weiner et al. (2020) define organizational readiness for change as the shared determination of organizational members to implement change (change commitment) and shared belief in their

collective ability to do so (change self-efficacy), conceptually defining organizational readiness for change and developing a management science theory focused on the organizational level.

This theory was useful because, during the COVID-19 pandemic, there was a need for changes in the modes of provision of library services. Therefore, the majority of academic institutions provided financial support to their libraries so that they could digitize their collections and enable users to access materials for teaching and learning activities. According to Tsekea and Chigwada (2020), due to the digitization of library collections, academic libraries in Zimbabwe were able to provide digital and virtual library services.

However, this theory of organization readiness for change allowed libraries in this pandemic to change the relationship with their users instead of a face-to-face relationship. Most libraries significantly shifted from physical library consultations and used mobile phones, e-mailto help users and work at home in order to minimize the spread of disease and to observe social distancing protocol.

### RESEARCH METHODOLOGY

This study used a mixed research approach to allow both qualitative and quantitative techniques. It is used to collect both quantitative and qualitative data or to identify variables that can later be tested quantitatively (Creswell, 2012). A mixed approach is an active approach that gathers data easily. Therefore, the present study employed a mixed research approach to assess readiness for the provision of library services during the COVID-19 pandemic in academic libraries located in the Dares Salaam region of Tanzania.

The study was conducted at the Muhimbili University of Health and Allied Sciences and Herbert Kairuki Memorial University. The population of the study was made up of ICT, librarians, staff, and students. The study's sample size includes 208 respondents, of whom 200 were students, 4 were ICT staff, and 4 were librarians' staff. The convenience sampling technique was used to select students who filled out the questionnaire in this study. Purposive sampling was used to select librarians and ICT staff who were interviewed. Etikan et al. (2016) assert that through the purposive sampling procedure, a researcher selects individuals or groups who are familiar with and conversant with the subject matter.

Regarding data collection methods, a descriptive survey method was employed to gather data,

where qualitative data were gathered by using a semi-structured key formant interview guide and quantitative data were gathered through a questionnaire. The questionnaire that was given to study respondents had both open-ended and closed-ended items. Specific questions based on the research's aims and questions were included in the questionnaire. Despite having no clear connection to the study's objectives, the generic questions, such as those about the respondents' profiles, brought value to the study. Additionally, information gathered from ICT and the librarian's staff was done using face-toface interviews. The use of more than one method of data collection made it easy to converge or confirm the findings from different data sources. During interpretation and drawing conclusions from the data, information gathered from the interviews and open-ended questions from a questionnaire greatly added value. Qualitative data were analyzed using the thematic analysis method, whereas quantitative data were analyzed using SPSS software. Data are presented using tables and graphs.

## Socio-demographic information of the user respondents

The socio-demographic features of the respondents had to be taken into account. These included details about the respondents' age, educational attainment, and degree program, which were utilized to assess the readiness of academic libraries to provide their service during the COVID-19 pandemic. Descriptive statistics (frequency and percent) were created in order to determine the distribution of respondents depending on different attributes. For further details, see Table 1.

The results of the study showed that 62.2% were male and 37.8% were female. On the age scale, 56.7% of the respondents fell between 20 and 24 years of age. The findings in Table 1 show that a significant number of the respondents (86.1%) were pursuing a bachelor degree, followed by those who were pursuing a diploma (13.9%. Also, the result showed that most of the respondents were pursuing a doctor of medicine (66.7%), followed by environment and health science (22.2%), and nursing and midwifery (11.1%). This shows that the majority of respondents were pursuing a doctor of medicine, which was also important for a successful response to the COVID-19 pandemic. In order to meet the need for medical assistance and learn more about this pandemic, they made use of the library to get various materials based on strategies to slow the spread of disease.

# The readiness for working practices during the COVID-19 pandemic in surveyed libraries

The outbreak of the COVID-19 pandemic has greatly impacted the working environment in higher education institutions, including academic libraries, in the provision of their services to users. It means that even though all of these two libraries reported having some sort of preparedness for handling a pandemic situation, no library was prepared to face such a huge global pandemic as COVID-19. So, the first objective in this study was to determine the readiness of academic libraries to provide library services in response to the COVID-19 pandemic working environment.

Table 1: Socio-demographic: Information of the Students Respondents

Variable	Characteristic	Frequency	Percent
Gender	Male	112	62.2
	Female	68	37.8
Age	20-24	102	56.7
	25-29	17	9.4
	30-34	26	14.4
	35-39	15	8.3
	40 Above	20	11.1
Educational Level	Diploma	25	13.9
	Bachelor Degree	155	86.1
Degree Programmes	Doctor of Medicine	120	66.7
	Environment health	40	22.2
	Nursing & Midwife	20	11.1

Source: Survey data, (2022)

Readiness for the provision of newly added library services

Academic libraries in Tanzania encountered numerous difficulties during the temporary closure of universities to control the pandemic, just like in other underdeveloped nations. In Tanzania, all educational institutions, from primary schools to university level, have been closed since March 17, 2020, and will resume classes at the beginning of June 1, 2020. In making efforts to review the possible approaches, some institutions provided digital equipment that guaranteed the continuity of the learning process and adopted digital platforms accredited for distance learning in order to eliminate the gap created by this crisis. However, most academic libraries operate on tight budgets they get from parent institutions. Due to this situation, academic libraries struggled to implement quick changes. Therefore, it was necessary to know if academic libraries were prepared to introduce new services to ensure that the information needs of library users were met during the COVID-19 pandemic. The findings from librarians and users show that libraries were not prepared to introduce new services like book delivery for staff and students during the temporary closure. There were no reserve electronic books uploaded to the library databases or later to websites, as well as no prepared quarantine areas for returned books. Therefore, the quantitative results show that the majority of users (80.6%) revealed that their libraries were not ready to offer new library services when universities and institutions were temporarily closed as a result of the COVID-19 pandemic. Even if they continued to offer services, the libraries were unable to satisfy users' information needs since they concentrated on the upkeep and promotion of the electronic resources they already had before the COVID-19 outbreak. This shows that there were no new services added. Figure 1 provides extra information as follows:

Source: Field Data (2022)

The results in Figure 1 show that the surveyed libraries were not prepared for temporary closures. In addition, the findings obtained through the interview with the librarian revealed that libraries we're not ready to offer new services to users since it was challenging to update their services in a timely manner. For example, one respondent had this to say during the interview:

"It's true to say that our only preparation for the current situation was to adhere to new rules that required both staff and patrons to wash their hands before leaving the library, to wear face masks, and to prohibit persons with flu-like symptoms from entering the library in order to protect themselves. Therefore, the nature of work remained the same" (Librarian 1, June 2022).

The above findings show that the library needs to be prioritized by parent institutions so that it can serve the needs of patrons in any crisis since it serves as a center of information in an academic institution.

However, Sichuan University Library (2020) in China reported that other libraries shut down their operations due to a lack of funding to buy the necessary equipment for digitization, and since there was no online service available, they remained closed. The results of this study, however, show that both two libraries remained open despite the fact that they lacked the funding to produce resources in digital form.

Begum and Elahi (2022) further assert, "None of the previous degrees of preparedness of the libraries were enough to struggle against an unknown opponent such as COVID-19." The patrons have suffered as a result of the library closure during the institution's brief closure. But the surveyed libraries tried to offer a few limited services to their users via institutional websites.

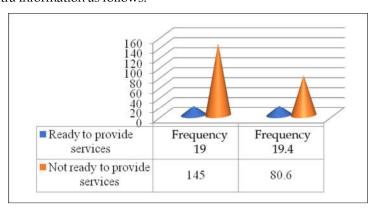


Fig. 1: Readiness on provision of newly library services

# Opinion on the readiness to access free online information

The purpose of libraries is to select, collect, and preserve information. To facilitate access to the collections during the COVID-19 pandemic, the emphasis was put on the provision of information resources. Notably, the provision of online information resources becomes very relevant as the COVID-19 pandemic discourages users from visiting libraries. Consequently, academic libraries were required to provide online information resources and supporting technologies during the COVID-19 pandemic.

Thus, the researcher examined whether or not the readiness of academic libraries to provide free online information resources was responsive to the COVID-19 pandemic. Opinions from library users who participated in this study varied as follows: HKMU 35 (49.3%), and MUHAS 53 (50.5%) libraries expressed that their respective libraries provided online database links to access electronic collections, while 19 (26.8%) from HKMU and MUHAS 27 (25.7%) reported that library users were not sure if their institutions provided free online information resources or not, whereas 17 (23.9%) from HKMU and 25 (23.8%) from MUHAS libraries felt that their institutions did not provide free online information resources. Table 2. summarizes the opinions of library users regarding their readiness to access online information resources responsive to the COVID-19 pandemic.

The findings, as shown in Table 2, show that about 50% of library users felt that academic libraries were not prepared to provide online information resources. These findings suggest that the online information resources provided by the studied academic libraries were not satisfactory, indicating that these libraries were not prepared to respond to the new demands caused by the COVID-19 pandemic.

On the other hand, responses from library staff revealed that the surveyed universities used the Online Public Access Catalogue (OPAC) and institutional repositories for library users to access free online resources such as electronic journals, electronic books, and other items. The findings further disclosed that theses and dissertations in electronic format were uploaded to an online database, while many print materials remained unchanged.

Additionally, during the interview, respondents stated that several links that allowed library users to access information in many databases were provided. Those links include local libraries like TLC and the British Council, as well as COTUL, WHO, AGORA, OARE, ARDI, and the aforementioned databases. The links enabled users to find free online resources for studying, including electronic books, e-journals, and information about the COVID-19 pandemic. During the interview, the respondent had this to say:

Table 2: Opinions regarding readiness in access online information resources during COVID-19

Response -	HKMU		MUHAS	
	Frequency	Percent	Frequency	Percent
Provided online resources	35	49.3	53	50.5
Not sure	19	26.8	27	25.7
Did not provided online resources	17	23.9	25	23.8
Total	71	100	105	100

Source: Field data, 2022

"Funds set aside for the digitalization of local resources were used to purchase internet bundles and pay subscription fees to COTUL in order to allow our library users to access information. Online notes, database links, Google Classroom, and e-learning platforms were additional tools." (ICT 2, HKMU May, 2022).

This statement shows how libraries continued to offer their services in a number of ways even during

the COVID era. The aforementioned findings are comparable to those by Walsh and Rana (2020), who also noted that librarians assist in the distribution of articles, case studies, and other e-resources for free online projects by database providers and internet corporations. Therefore, the value of collaboration often referred to as a consortium among libraries has been reinforced by access to free internet

information to promote learning. Therefore, COVID-19 has given academic librarians a special opportunity to expand their service, key roles, and core values in supporting teaching and learning in their institutions by offering free online services.

#### Readiness for the Provision of Circulation Service

The circulation service is important in libraries since it links the library collections to the readers by providing issue and return options. It ensures that books are used by users. The person in charge of this area is responsible for lending books to users and maintaining a list of who has borrowed what, what has been returned, and what is overdue now. Additionally, collect costs for missing or damaged items as well as fines for overdue materials.

Therefore, the outbreak of the COVID-19 pandemic caused changes in regulations for issuing and returning books. The findings of this study show that both survey libraries cancelled the overdue rule and increased the time to continue using borrowed books. Respondents were asked about whether they borrowed information resources during the COVID-19 pandemic. The findings show that 108 (60.0%) agreed to check out and then return printed materials, whereas only 39 (21.7%) did not agree. This is indicated in Table 3 as follows:

**Table 3:** Readiness on Provision Circulation Service during COVID 19 Pandemic

Response	Frequency	Percent
Provided circulation services	108	60.0
Not sure	33	18.3
Not provided circulation services	39	21.7
Total	180	100.0

Source: Field data, (2022)

The finding shows that the libraries were opened, and physical circulation and lending of books were conducted after reopening universities, where borrowing of books was allowed without late fee payment. These findings support Winata et al. (2020), whose research demonstrates that some libraries offer book delivery services. Some libraries had taken extraordinary measures, such as setting up outside book drops via courier service (Tolppanen, 2021). Others provided book sterilizers (Ma, 2020).

The findings indicate that these measures have preserved access to the library's instructional and technological resources. Many libraries stopped charging late fees for books and other materials that were borrowed (Cox & Brewster, 2020; Dadhe & Dubey, 2020). In this situation, evidence gathered from interviews reveals that many books were lost because of the COVID-19 pandemic, as revealed by one respondent from HKMU who had this to say:

"Many books went missing during the closure, and those who didn't return them were reluctant to use the library because of strict rules requiring them to either replace the lost books with new ones or pay cash. Most users were not able to afford the cost since it was determined by the replacement value of the book, which was higher than the item's original price, so they changed into electronic resources rather than print" (Librarian 2, May 2022).

## Moreover, one key informant from MUHAS added that:

"Because we did not set up a quarantine area for returned books before they were placed back on the shelves, our customers were reluctant to borrow books from us. They believed they could have the Corona virus." (Librarian 1 MUHAS, June 2022)

The above findings show that circulation service was affected during the COVID-19 pandemic. Library users, who mostly depend on print resources, failed to use this service.

# Readiness on the Strategies to Overcome the Pandemic

Readiness to use a new guideline for user health and safety during the COVID-19 pandemic

Guidelines for reducing the risk of COVID-19 transmission in university settings released by the Ministry of Health, Community Development, Gender, Elderly, and Children (Government of the United Republic of Tanzania, 2020). These recommendations include: respecting social distancing; setting up hand washing facilities; providing running water; encouraging regular hand washing; and wearing face masks (Manyengo, 2021). Therefore, there was a need to ascertain if the surveyed libraries adhered to these rules. The findings (see Table 4.) show that the majority of respondents, 136 (75.9%), agree that the library insisted their users wash their hands and utilized hand sanitizer during the COVID-19 pandemic.

**Table 4:** Readiness on use Preventing Measures during COVID 19 Pandemic

Variable	Frequency	Percent
Used preventive measures	136	75.9
Not sure	19	10.6
Not using preventive measures	24	13.4
Total	179	99.9

Source: Survey data (2022)

The findings show that libraries utilize hand sanitizers right away after sending or receiving books. This supports and verifies earlier findings in the literature study by Dadhe & Dubey (2020; Guo et al., 2020), which stated that libraries were encouraged to use masks, hand washing, the use of sanitizers, and social distancing. During the interview, one key informant from MUHAS had this to say:

"We posted this notice at the checkpoint, and to maintain social distance, we marked circles on the ground for people to stand in, especially at the entrance and exit of the library and at the circulation desk. All librarians and users were also required to wash their hands, put on masks before entering the library, and keep a safe distance when using library resources" (Librarian 3, June 2022).

During library operating hours, libraries took health and safety precautions to safeguard employees and customers from the COVID-19 infection. The procedures used to monitor social distancing are shown in Plate 1.

In plate 1, the MUHAS library's reserve book section, where a maker space is posted for users to observe when they require a librarian for a service, users were required to adhere to social distancing.

According to Ortega-Martnez et al. (2021), one of the most effective strategies utilized by academic libraries worldwide is observing social distance. Social distancing was one measure used to halt the pandemic's spread. In their article "International Perspectives and Initiatives," Ali & Gatiti (2020) argue that although social isolation can slow the development of COVID-19, one of the librarian's jobs during the COVID-19 pandemic is to promote public health awareness.

#### Readiness to Use an Institutional Website

Many libraries kept offering library services via institutional websites throughout the COVID-19 outbreak. Academic librarians made an attempt to protect their users and adhere to COVID-19 university protocols. The findings show that, despite some respondents' disagreements, 97 (57.1%) respondents agreed that institutional websites continued to function throughout the interim closure of universities. The effectiveness of this service depended on how many individuals were willing to utilize the library website at that time. Due to living in remote areas, some users had trouble connecting to the internet. This is indicated in Table 5.



Plate 1: Photo taken during Interview of MUHAS Library, June 2022

Table 5: Readiness on Use Institutional Website

Use Institutional Website	Frequency	Percent
Used Institutional Website	97	57.1
Not sure	39	22.9
Not used Institutional Website	34	20.0
Total	170	100

Source: Field data (2022)

Additionally, a member of the library's ICT staff during the interview claimed that they used the website to offer various connections with people to access information. The following is what key informants and ICT staff from HKMU had to say:

"Throughout both the COVID-19 pandemic outbreaks, our institution's website remained a resource for users to access up-to-date information about the

COVID-19 pandemic's situation as well as electronic books and journals for their studies through free links to organizations like Consortium of Tanzania University and Research Libraries (COTUL) and WHO, as well as other lists of electronic resources to support their education." (ICT HKMU 1, June, 2022).

This argument shows that these libraries are prepared to use institutional websites to deliver their services to patrons. Access to information on these websites, however, depends on the readiness of patrons to search for and use electronic resources and the availability of computers.

### Readiness for the Use of social media

Libraries used social media as platforms for teaching and learning during the COVID-19 pandemic. According to the findings, 106 (58.9%) claimed that university libraries had contacted them and given them information via social media sites, such as Facebook, WhatsApp, Twitter, and Instagram. The surveyed libraries used social media platforms to alert their clients to the availability of online library services during the brief closure and reopening of universities. This is indicated in Table 6:

Table 6: Readiness on Use of social media for Sharing Information

Library use of social media	Frequency	Percent
Used social media for sharing information	106	59.9
Not sure	25	14.1
Not used social media to share information	46	25.9
Total	177	99.9

Source: Field data (2022)

The findings show that social media was the most practical tool for getting information about the COVID-19 pandemic. Libraries were aimed at meeting patrons' demand while maintaining the safety and comfort of the workers and providing service in these environments by using social media during the reopening of the universities. Similarly, Dadhe& Dubey (2020) found social media applications like WhatsApp and Facebook that are utilized every day to maintain information flowing to the user.

Additionally, the surveyed libraries employed a variety of other techniques to deliver their services,

including institutional repositories and KOHA, online classes and meetings, Zoom, emails and virtual programs, digital content, and various links for users' educational purposes.

Readiness for the Provision of the COVID-19 Pandemic Information Service

The COVID-19 pandemic has presented difficulties for a variety of people and organizations. To comprehend this illness and learn how to treat it, one needs access to trustworthy information. According to Ali and Gatiti (2020), libraries have a social obligation to promote public health awareness and give their users access to the most current information. Despite the fact that there are several sources available in society, the study was interested in learning whether the users of the selected libraries were given access to this information. The results show that 112 (62.2%) respondents concurred that they had access to COVID-19 information on causes and preventive actions. This is indicated in Table 7.

**Table 7:** Readiness on Provision of COVID – 19 Pandemic Information Service

Information about COVID-19	Frequency	Percent
Provided COVID-19 Pandemic information	112	68.2
Not sure	13	7.9
Not provided information on COVID-19 pandemic	39	23.8
Total	164	99.9

Source: Field data (2022)

Additionally, the libraries under investigation utilized the WHO link as a source of information and provided users with access to this content. Ali and Gatiti (2020) said that the World Health Organization is one of the most reliable sources of information on the pandemic. The surveyed libraries provided the service of disseminating information about the COVID-19 pandemic and how library users protect themselves through notes boards. One respondent from MUHAS stated that:

"We put this picture before entering the library in order to make sure our users took precautions during this pandemic." (MUHAS librarian, 1 June 2023)

There is additional information in Plate 2.



Plate 2: Photo taken during data collection at the MUHAS library in June 2022

Plate 2 shows information about the COVID-19 pandemic, how it spreads from one person to another, and how to stay safe. The surveyed libraries promoted health awareness and gave their users access to information about the COVID-19 pandemic in order to be safe when they use library services.

The Challenges Faced Libraries Readiness on Provision of Services during Covid-19 Pandemic

#### Dependence on online services

The respondents were supposed to indicate whether the COVID-19 pandemic was made more difficult by their dependency on online services. According to the results reported by 40 out of 70 respondents (57.1%) from HKMU and 59 from MUHAS out of 105 students (56.2%), using online services presented some challenges, while 30 (42.9%) from HKMU and 46 (43.8%) from MUHAS said that using online services presented no challenges. The findings are indicated in Table 8 as follows:

Table 8: Dependence on Online Services during COVID - 19

According to the results in Table 8, the majority of respondents said that relying on the internet during that time was a new strategy for them and that it was a challenge for users who rely on library computers because they are few. One of the libraries included in the survey only has 166 computers, which is not enough for all users who rely on library facilities. Also, the inability of users to use this service was hampered by this circumstance.

Furthermore, information gathered during an interview with one of the key informants revealed that,

"We stopped the lessons after one month because students had no reliable contacts or network, especially those who went back to upcountry. Secondly, some senior lecturers and technical staff were affected by technophobia and needed extra effort to guide them, while others needed faceto-face instruction. Thirdly, working in an environment of caution where our work is to click and touch hardware on something that at that time seemed dangerous because the means of transmission of COVID-19 were not directly known" (ICT 1 HKMU May 2022).

Donordon so online	HKMU		MUHAS	
Dependence online	Frequency	Percent	Frequency	Percent
Depended on online services	40	57.1	59	56.2
I do not depend on online services	30	42.9	46	43.8
Total		100.0		100.0

Source: Field Data (2022)

The slow internet speed and lack of adequate technological skills triggered additional obstacles to dependency on online services. The slow Internet made it difficult for users to find e-books, e-journals, and other resources quickly for use in completing assignments or for personal study. Additionally, it implies that finding these items requires knowledge to access them.

Moreover, the findings from the interview revealed that due to a lack of funding to purchase resources for essentially a short period of time to convert physical to digital form, it was difficult for librarians to deliver this service to their clients. Furthermore, poor internet connectivity prevented the use of computers for information searching. The findings are consistent with Carbery et al. (2020) and Walsh & Rana (2020), who claimed that libraries have experienced additional hurdles, such as budgetary challenges and a lack of technological skills, in transferring academic library services online for library customers.

#### Lack of skills to access online services

The lack of ICT proficiency among the majority of African patrons and librarians during the COVID-19 pandemic was brought up when the respondents were questioned if it was a challenge for them. They depend on conventional (physical) methods to obtain services. The results (see Table 4.17) show that 36 respondents (52.2%) from HKMU and 58 (55.7%) from MUHAS said that they found it difficult to obtain online services, while 33 students (47.8%) and 46 (44.2%) said that it was not a problem. For more information, see Table 9.

**Table 9:** Lack of Skills to Access Online Service during COVID - 19

Lack of	HKMU		MUHAS	
skills	Frequency	Percent	Frequency	Percent
Agree	36	52.2	58	55.8
Disagree	33	47.8	46	44.2
Total	69	100.0	104	100.0

Source: Field data (2022)

Most academic libraries teach their users how to use library services. The training was based on searching for materials on the website, OPAC, Facebook, Instagram, Twitter, and physical resources during the orientation period. The allocated time for training was not enough for them to understand how to access, evaluate, communicate, and produce documents electronically by using computers and communication technologies. To observe social

distance during the COVID-19 pandemic, users isolated themselves since they had no connection in the common hour and had no close conversation with ICT personnel in order to be safe. Some users lacked support for searching materials on the Internet.

## Limited time for using library services during the COVID-19 pandemic

Another challenge in providing library services during the COVID-19 outbreak was the limited working hours. According to the results of the survey of libraries (see Table 4.15), 55 respondents (80.9%) from HKMU as well as 90 (84.1%) from MUHAS said that they had trouble using library resources, whereas 13 respondents (19.1. %) from HKMU and 17 (15.9%) from MUHAS said that they had no trouble using the resources because there was enough time.

Table 10: Limited time to use library service during COVID - 19

Limited	HKMU		MUHAS	
on Time	Frequency	Percent	Frequency	Percent
Time limited	55	80.9	90	84.1
Not time limited	13	19.1	17	15.9
Total	68	100.0	107	100.0

Source: Field data (2022)

During the public health emergency, libraries were compelled to reschedule their operating hours due to the novel coronavirus (COVID-19). In order to reduce the transmission of disease, a key informant in one of the surveyed libraries stated that,

"One librarian came to open the library six hours a day; the exercise lasted only for three months after the death tally."

Therefore, this situation led to a challenge for library users who would depend on library facilities for a variety of reasons, including completing assignments, borrowing books, and accessing electronic resources. Depending on their level of education, these users also required more time to use the facilities for their studies.

The scenario also presented a dilemma for librarians, who had to cut back on working hours in order to comply with government regulations. It caused the library personnel to labor at the bare minimum. For instance, during a temporary closure, one of the surveyed libraries reported that

one person from the library and one from the ICT department came instead of two people per day for each section, while others worked from home. Some of these workers complained about not having a private workspace at home and lacking certain skills. Harris (2021), who agreed with this statement, claimed that there were not enough strategies to help librarians learn how to continue working at home during the pandemic; a lack of personal computers and the Internet was also a challenge for them. This has always been a problem in Africa. The library budget has been dwindling over the years and has never been enough to support digital transformation.

# CONCLUSION AND RECOMMENDATIONS

Based on the findings, preparedness for the provision of library services cannot be avoided because of the advances in technology and environmental changes. Different challenges faced and/or facing the library department and users during the COVID-19 pandemic have been described in this study. Moreover, the findings of this study provide evidence that can be the basis for making new strategies while re-designing new services or improving the existing services in the library to make new decisions for the future to reduce the gap that patrons may likely experience due to an emergency pandemic like COVID-19.

When preparing a budget for each department, the management of educational institutions should put more emphasis on the library because it is the center for accessing information services. Users depend on getting free materials and trusted sources of information and knowledge for their studies.

Libraries should be at the forefront of the adoption of a variety of methods and tools for providing library services to their patrons in order to overcome unexpected changes brought on by misfortunes like the COVID-19 pandemic and facilitate access to information so as to meet their patrons' information needs. The qualities of service are the most important asset factors in educational achievement.

Secondly, libraries should reassess their facilities, resources, strategies, and services in order to be capable of playing a vital role in supporting their users.

The government should also examine present rules and open the door for librarians to freely engage in virtual services with an appropriate regulatory framework.

Lastly, the government should set aside funds to support training for librarians on the proper use of ICT for offering library services and should improve the ICT infrastructure of libraries.

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