



# Exploring the impact of covid-19 lockdown on access to library resources by University of Zambia students: a case of the school of Samora Machel Veterinary Medicine

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## Abstract

**Objectives-** The main objective of this study was to examine the impact of the 2020/21 COVID-19 pandemic lockdown on access to information resources and services by Veterinary Medicine students at the University of Zambia.

**Methods-** The research adopted a survey design approach in which a semi-structured questionnaire was employed for data collection. A convenient sampling technique was used to recruit fifty (50) participants. Data was analysed using Statistical Package for the Social Sciences version 20.

**Results-** This work has found that 54% of the respondents were ignorant of the information resources and services that were available via remote access during the pandemic lockdown while 46% were aware. The study has further established that 46% of the respondents accessed the resources while 54% did not. Further findings reveal that past examination papers were the most accessed resources. The major challenges encountered include unreliable Internet connectivity and stringent login credentials.

**Conclusions-** The study concludes that COVID-19 pandemic lockdown negatively affected students' access to information resources and this ultimately influenced their academic performance. It is recommended that the library realign its services with the changing library and information landscape. These findings provide useful information on how librarians can remodel their services to match new demands presented by the COVID-19 pandemic.

**Keywords:** covid-19 pandemic, information access, veterinary medicine students, university of zambia

## 1. Introduction

Access to accurate and timely information can be a matter of life and death. It also makes it possible for citizens to follow responses to the crisis, such as confinement rules, regulations of travel and schooling, virus testing, medical equipment supplies, and economic aid or stimulus packages (UNESCO, 2020) [10]. However, the sudden outbreak of COVID-19 came with a lot of challenges and opportunities to the education sector since the World Health Organization (WHO) declared it as a pandemic in 2019. COVID-19 situation challenged the education system across the world and forced educators to shift to an online mode of teaching overnight.

Academic libraries around the world have been working hard to provide access to collections and services remotely, often investing time and effort in updating websites and computer systems in order to deal with demand. While many academic libraries already had a strong digital presence, many others have now moved to create one in order to continue serving members.

Asif and Sign (2020) [3] indicated the library services provided by libraries, which included among them virtual reference service like chat/e-mail, self-check-in and checkout of books, scanning of chapters from books, journals articles for remote users LibGuide-List of resources available in the library and update library website dynamic content and useful tutorials.

In Zambia, academic institutions such as universities were temporarily closed for some time during the 2020 and 2021 pandemic lockdowns in order to contain and reduce the spread of the virus. This caused most libraries, to shift to digital platforms and provide remote and online services. One such library is the Samora Machel Veterinary Medicine Library at the University of Zambia (UNZA). This study examined the impact of the 2020/2021 COVID-19 pandemic lockdown on access to information resources by Samora Machel Veterinary Medicine students.

### 1.1 Background: Samora Machel Veterinary Medicine Library

The Samora Machel Veterinary Library provides quality scholarly resources, services, and instruction to support the education and research programs of the School of Veterinary Medicine. Additional library services include instruction, information searching, interlibrary loan, etc. The library serves the faculty, staff and students of the Schools of Veterinary Medicine as well as Agricultural Sciences. The library's current holdings include both print and electronic resources dealing with all aspects of veterinary medicine, as well as selected materials on the animal sciences and other related areas. These resources support the undergraduate, graduate, clinical, and research programs. Personalized individual and

group consultations are available in either the library, your office, or other campus location.

### 1.2 Library services during COVID-19 lockdown

In order to keep the university community safe VET library facilities were closed to the public and the library had to find ways of providing information resources to the students and staff embarked on the provision of resources online. Among the services, the library provided were remote access to e-resources, which included books, journals, past exam papers, research papers, thesis and dissertations. UNZA website had all the instructions on how students and other library users could access information and the librarian was always available virtually to respond to queries. On the other hand, library staff were busy working to ensure that materials were made available online to the users.

## 2. Problem statement

As COVID-19 pandemic infections spread globally, the Veterinary Medicine Library at UNZA had to shift its services to digital platforms in order to provide remotely. Despite the introduction of these novel services, little is known about how the pandemic lockdown affected students' access to information materials, which would influence the pace of their learning and subsequently, academic performance. This study was undertaken to address this gap.

## 3. Objectives of the study

The main objective of the study was to examine the impact of the COVID-19 pandemic lockdown on access to information resources by Veterinary Medicine students at UNZA. The following specific objectives guided this study:

1. To ascertain awareness levels of the available information resources in the Veterinary Medicine Library;
2. To find out the types of information resources accessed by Veterinary medicine students;
3. To determine the satisfaction levels of Veterinary medicine students in the resources provided by the library;
4. To ascertain the challenges faced by Veterinary medicine students as they accessed information resources.

## 4. Literature review

This literature review covered different studies on information access by students during the COVID-19 pandemic lockdown. A study conducted by Sahu and Kumbar (2021) <sup>[7]</sup> at the Central University of Gujarat (CUG) Gandhinagar, India, with regard to students' access to information resources due to the on-going pandemic lockdown of educational institutions, observed that they were not able to access the print resources and digital resources provided in the physical libraries of their institutions.

A case study on the impact of COVID-19 on Academic Libraries conducted by Rao (2021) <sup>[6]</sup> in India revealed that the COVID-19 pandemic has a significant impact on the usage of resources and services provided by MAHE libraries. The libraries were kept open, but the working hours of the libraries have been reduced during the COVID-19 pandemic. The study also found that the majority of the libraries have seen a significant decrease in the use of physical resources and an increase in the usage of digital resources. The study further revealed that remote access facility was extensively used by the

users of MAHE libraries to access the relevant literature for teaching, learning, patient care and research activities and thus to meet their information needs.

According to a study by Supeio, *et al* (2021) <sup>[8]</sup>, television was the primary, most believable, and preferred source when seeking information. The Internet as a preferred source of information was significantly associated with a high level of knowledge. In contrast, the information sourced from interpersonal channels were found to make college students very cautious. This was in a paper aimed to ascertain the levels of knowledge, precaution, and fear of COVID-19 of the college in Iloilo, Philippines, and determine the effects of their information-seeking behavior amidst the COVID-19 pandemic.

On the other hand, a study by Alabdulwahhab *et al* (2021) <sup>[11]</sup>, observed that Google and YouTube remained the primary sources for searching online learning resources. Despite the majority of the students' satisfaction with the online educational resources in their study, it was revealed that a bulk of students were neither aware of the free online e-resources offered by Majmaah University nor visited the central library, the study was done in the Kingdom of Saudi Arabia.

A study by Antunes, Lopes and Sanches (2021) <sup>[2]</sup> entitled "Student satisfaction with library resources in the COVID-19 era: a case study of Portuguese academic libraries" revealed that the perception of academic students concerning their libraries' response to COVID-19 is satisfactory, recognizing support received as being positive. However, the use of available electronic resources was not as expected; most students were unaware of the availability of reference databases on campus and the possibility of using them remotely.

Tyler and Hastings (2011) <sup>[9]</sup> in their study to determine if virtual patrons are satisfied with the resources and services being provided by a university's online library analyzed demographic characteristics of students in order to determine if any influenced students' satisfaction. It was revealed that several demographic factors were found to influence student satisfaction with the library's online resources: age, gender, achieved educational level, student status, and computer experience. Further, the study revealed that one factor, computer experience, was found to influence student satisfaction with the library's online services. Overall, students reported satisfaction with the university's online library resources and services. The study was on factors influencing virtual patron satisfaction with online library resources and services in Florida.

A research by Omeluzor, Nwaomah and Molokwu (2021) <sup>[7]</sup> investigated the dissemination of information in meeting the information needs of library patrons during the COVID-19 pandemic and lockdown of university libraries in Nigeria. The findings show that fewer respondents (43 or 25%) had access to print materials, while the majority (135 or 76%) did not. The results also show that libraries disseminated e-books and e-journals to their patrons during the pandemic, as indicated by 133 (74%) of the respondents. The majority of the respondents (104 or 58%) agreed that libraries provided access to online databases during the COVID-19 pandemic. Similarly, the results revealed that the majority (104 or 58%) of the respondents agreed that libraries distributed newspaper cuttings and new arrivals to their patrons during the COVID-

19 era.

A study by Ncube (2021) [6] done at Zimbabwe Open University to establish how the students were accessing the library and the challenges they were facing thereof established that the traditional services of the library were not on offer to users at the moment due to travel restrictions and the curfew imposed as a result of COVID-19. The library could only be accessed electronically/remotely though only a few students had access to the library's e-resources. Students lacked knowledge on the availability of e-resources and those who had access to them could not use some of the electronic journals as they either required passwords or were not available. Findings also showed that there were no librarians to respond to requests and questions remotely, making it difficult to navigate through the vast amounts of e-resources. It was also established that some students had challenges such as not having computer gadgets, lack of bandwidth/ internet connectivity and information literacy skills. It was recommended that students are rigorously equipped with information literacy skills and that the content must not be complicated, even phones must be used to access them.

In addition, a study on trends, opportunities and scope of libraries during COVID-19 pandemic done by Asif & Singh (2020) [3], revealed that the pandemic has affected the users in finding the information they need from the libraries due to the worldwide lockdown.

## 5. Materials and Methods

The study adopted a survey research method in which semi-structured online questionnaires were used for data collection. The study population comprised all Veterinary medicine students from second to sixth year of study. A convenient sampling technique was used to recruit fifty (50) participants, who were required to complete the questionnaire within a period of one week. Data for the study were collected between January and February 2022. Data was coded and abstracted into the Microsoft Excel spreadsheet and thereafter loaded into the Statistical Package for the Social Sciences (SPSS) version 20 for final analysis. Data was presented in tables, frequencies and percentages based on study objectives.

### Research limitations/implications

The study used an online questionnaire only as the data collection instrument, as it was the most suitable one to get data from librarians working from home and because of the COVID-19 health guidance such as maintaining social distance. The other methods were not used because of financial constraints.

## 6. Findings

This section presents findings of the study. The findings are presented according to the research objectives.

### 6.1 Demographic characteristics of the respondents

A total number of 50 questionnaires were distributed to Veterinary medical students. Figure 1 below indicates that of the 50 students, who participated in the survey, 32(64%) were male and 18(36%) were female. Survey figures indicate a larger percentage of males than females.

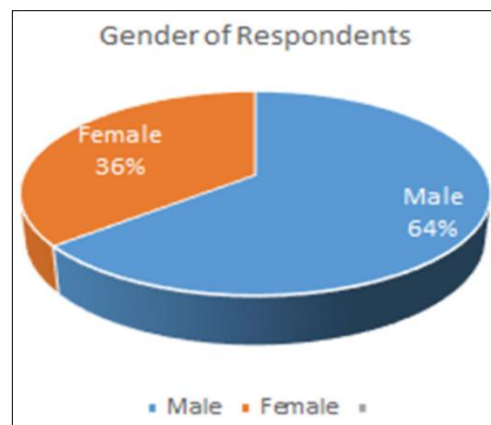


Fig 1: Gender of respondents

In terms of age distribution of participants, Figure 2 below indicates the following: Majority 31(62%) were in the age cohort of 21-30 years, 16 (32%) were in the age range of 31-35 years and three (6%) were above 36 years.

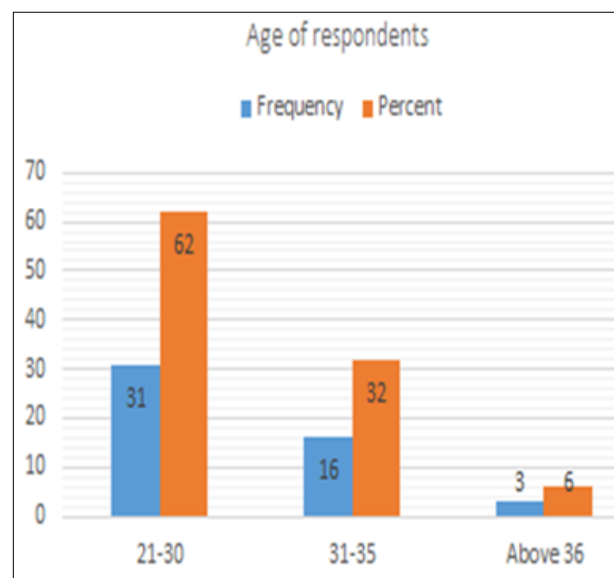


Fig 2: Age distribution

### 6.2 Awareness and usage of information resources

Students were asked if they were aware of the information resources the library was providing during COVID-19 lockdown. The findings revealed that only 23 (46%) of the respondents were aware while 27 (54%) indicated that they were not aware. With regard to usage of information resources, the findings revealed that 23(46%) of the students accessed the resources whilst 27(54%) did not.

### 6.3 Access to information resources

Furthermore, researchers asked students how they accessed information resources. The findings revealed that 38(46.9%) used Moodle/Astria e-learning platforms, 27(33%) used social media tools such as Facebook, 10 (12.3%) used virtual reference service and the library website was used by only 6 (7.4%) students. Besides, 14 other students indicated that they also accessed information resources through other means such as friends, lecturers, radio, YouTube, audio-visual mode, Google meet and Zoom video conferencing.

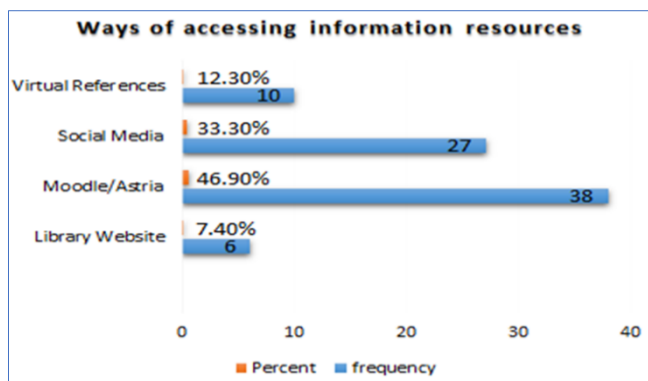


Fig 3: Ways of accessing information resources

**6.4 Types of information resources accessed**

In order to establish the types of information resources students accessed Table 1 below gives illustrations. Past exam papers were the most accessed resources 15(50%), followed by online books 6(20%), research papers 5(16.5%), online journals (10%) and research 4life resources were the least accessed and are represented by one (3.3%).

Table 1: Types of information resources accessed

Type of information accessed	Frequency	Percent
Past exam papers	15	50.0%
Online books	6	20.0%
Research papers	5	16.7%
Online Journals	3	10.0%
Research4life	1	3.3%
Total	30	100.0%

**6.5 Satisfaction levels**

In trying to determine whether students were satisfied with the information resources accessed during COVID-19 lockdown, majority 37(74%) indicated that they were not satisfied while 13(26%) indicated that they were satisfied. Further, the researchers asked how satisfied they were, the response was as follows: very satisfied 4(8%), satisfied 7(14%) unsatisfied 3(6%) and majority 36(72%) did not respond to the question. A follow-up question elicited information from students as to why they were not satisfied. The findings revealed that ten (10)

students complained of insufficient resources eight (8) students said that they had Network challenges and poor network connectivity, six (6) said they had limited access to information resources and others (4) said that information resources were not sufficient.

**6.6 Challenges faced by veterinary students**

In an open-ended question, students were asked to state the challenges they encountered as they accessed information resources during COVID 19 lockdown. Seventeen (17) students stated that they had network challenges/poor network connectivity. Ten (10) students indicated that they had no access to online information resources because of lack of login credentials/passwords. Seven (7) students lamented lack of bundles, gadgets and financial resources to access online information resources. Six (6) students indicated that they had little knowledge on using Moodle since they lacked orientation, four (4) students indicated that they had a problem with accessing Moodle because it was always congested and sometimes unavailable. Two (2) students stated that they had a challenge because gatherings and movement were restricted hence, they could not go to the Internet cafes to access the resources.

Furthermore, in an open-ended question, students were asked to suggest ways of how the challenges they mentioned could be resolved by the library. Twenty-four (48%) of the students suggested the library should orient or publicize to students information resources students can access other than books and studying space. Fourteen (28 %) proposed that Moodle connectivity be improved at all times because students have different study schedules. Eleven (22%) of the students also proposed that internet connectivity be improved while 10(20%) of the students said the library should provide equipment to students which they can use to access online resources. Other students, 9(18%) proposed that the library improve website accessibility. Three (6%) suggested that the library provide access to hard copies by allowing long-term borrowing even during the lockdown as long as security was guaranteed, while 2 (4%) of the students advised that the library improve awareness of the availability of access to COVID-19 information to library users.

Table 2: Suggested solutions

Rank	Suggestions	F	%
1	Publicize online information resources other than books	24	48%
2	Improve Moodle connectivity 24/7	14	28%
3	Improve internet connectivity	11	22%
4	Provide ICT equipment for accessing online resources	10	20%
5	Improve website accessibility	9	18%
6	Allow long-term borrowing of hard copies during the lockdown	3	6%
7	Enhance awareness of COVID-19 information resources	2	4%
8	Partner with Google to allow for strong and reliable search websites	2	4%

**7. Discussion of findings**

Although the study is subject to several limitations, such as non-inclusion of all the students at UNZA, the participants constituted a representative group required to understand the impact of COVID-19 pandemic lockdown on access to information resources by Veterinary Medicine Students. The purpose of this study was to explore the experiences of Veterinary Medicine students in accessing information

resources during the COVID-19 pandemic lockdown. To achieve our objectives, a convenient sampling technique was used to recruit 50 participants drawn from the second to sixth year of study. A semi-structured online questionnaire solicited data on awareness of the available information resources, whether or not students accessed information resources during COVID-19 pandemic lockdown, types of information resources accessed, satisfaction levels and the



challenges faced by students during the pandemic lockdown. The following section discusses the findings.

### 7.1 Awareness and usage of information resources

Concerning awareness and usage of the existing information resources in the Library, the findings revealed that only 46% of the respondents were aware of the resources and used them while 54% were not aware and therefore they did not use the resources. These findings are similar to the study findings by Alabdulwahhab *et al* (2021) <sup>[1]</sup> which revealed that despite the majority of the students' satisfaction with the online educational resources, a bulk of students were neither aware of the free online e-resources offered by Majmaah University nor visited the central library. These findings are further supported by Antunes, Lopes and Sanches (2021) <sup>[2]</sup>, who observed that the use of available electronic resources was not as expected because most students were unaware of the availability of reference databases on campus and the possibility of using them remotely. This therefore entails that lack of awareness of the information resources is attributed to the lack of a marketing strategy on the part of the library and also an indication of lack of information search skills and ICT equipment (such as laptops) among the students. Consequently, the library need to find ways of promoting information resources to students during and after the pandemic lockdown.

### 7.2 Access to information resources

Regarding how students accessed the resources during the pandemic lockdown, the study revealed that they accessed information resources through different means such as Moodle and Atria e-learning platforms, social media platforms such as Facebook, virtual references, library website, friends, radio, YouTube, webinars (Google meet and zoom video conferencing). These findings collaborate those of Sahu and Kumbar (2021) <sup>[7]</sup> who observed that due to the on-going pandemic lockdown of educational institutions, students were not able to access the print resources provided in the physical libraries of their institutions. Clearly, there is need to enhance digital platforms to create a conducive environment where students can easily access these resources.

### 7.3 Types of information resources accessed

Concerning the types of information resources accessed the findings showed that past examination papers were the most accessed resources, followed by e-books, research papers, online journals and research 4life resources. These findings agree with the results of a study by Omeluzor, Nwaomah and Molokwu (2021) <sup>[5]</sup> who observed that libraries disseminated e-books and e-journals to their patrons and provided access to online databases during the COVID-19 pandemic. The implication for these results is that the library needs to orient students on the importance of the other information resources apart from past examination papers. Furthermore, it also indicates that students may be lacking search skills in accessing other online resources hence, the reliance on past examination papers.

### 7.4 Satisfaction levels

Regarding whether students were satisfied or not with the services provided during the pandemic lockdown, the study showed that a majority 37 (74%) were not satisfied while

13(26%) were satisfied. These findings are an indication that the library needs to take stock of its service delivery practices in order to satisfy its users.

Concerning the reasons why they were not satisfied with the information resources provided, the key findings indicate insufficient information resources and network connectivity challenges. There is therefore need for the library to increase access to online information resources and improve network connectivity.

Using a Linkert scale, respondents were asked to indicate their satisfaction levels. The results showed that 4 (30%) were very satisfied, 7 (53.8%) were satisfied 3 (23%) were unsatisfied and 1(7.7%) did not respond to the question. The overall picture from these findings is that students were satisfied with the library service provision.

These results collaborate the findings of a study by Antunes, Lopes and Sanches (2021) <sup>[2]</sup> which revealed that the perception of academic students concerning their libraries' response to COVID-19 is satisfactory, recognizing support received as being positive support. Equally, Tyler and Hastings (2011) <sup>[9]</sup> reported students' satisfaction with the university's online library resources and services.

### 7.5 Challenges faced by Veterinary students

Perceived challenges regarding access to information resources during the pandemic lockdown include poor network connectivity, technical challenges when accessing online information resources, equipment to access online information resources and lack of skills on using Moodle. These findings are in line with the results of a study by Ncube (2021) <sup>[4]</sup> who established that some students had challenges such as not having computer gadgets, lack of bandwidth/internet connectivity and information literacy skills. In addition, a study on trends, opportunities and scope of libraries during COVID-19 pandemic done by Asif and Singh (2020) <sup>[3]</sup>, revealed that the pandemic has affected the users in finding the information they need from the libraries due to the worldwide lockdown. Furthermore, a follow up question elicited data on how perceived challenges could be resolved by the library. Suggested solutions include vigorous promotion of information resources, improving technical challenges affecting Moodle connectivity, improving Internet connectivity, and provision of ICT equipment (such as tablets) to students. It was further proposed that the library website be made more accessible and usable; provide access to hard copies by allowing long-term borrowing as long as security is guaranteed and proactively market COVID-19 related information resources.

## 8. Conclusion and recommendations

This study explored the experiences of how Veterinary Medicine Students at UNZA accessed information resources and services during the 2020/2021 COVID-19 lockdown. The findings of the study revealed a general lack of awareness of information resources and services offered by the library. With regard to the types of information resources accessed, examination papers featured prominently. The study also established that students who accessed information resources were satisfied with service delivery. The main challenge faced were poor Internet connectivity. Largely, COVID-19 lockdown had a negative effect on students' access to information resources resulting in poor academic performance.

Based on the research findings, the following recommendations are provided:

- The library should proactively market its information resources
- There is need for the library to devise a robust user education strategy in order to guide users on how to access these resources
- The library should improve its Internet connectivity

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