

An Assessment of the Impact of Covid 19 on Zimbabwean Universities Students

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Abstract

The outbreak of Covid-19 resulted in the immediate and unplanned closure of universities across the world. This resulted in cancellation of classes, graduation ceremonies resulting in reduced job prospects, increased uncertainties for students and in ability to cope with online lessons. An evaluation of these detailed impacts at Harare Institute of Technology in Zimbabwe indicated that serious measures in terms of fast internet, availability for electronic gadgets for learning, affordable data and ICT friendly infrastructure must be put in place. In addition, universities need to seriously review their teaching curricula so that it has both physical and online learning methods options as Covid-19 is here to stay. Furthermore, to consider virtual research groups.

Keywords: Covid-19, future of universities, impact on universities, online learning

1. Introduction

Covid-19 was first recognized in the Hubei Province, City of Wuhan, China in late 2019 (Sansa, 2020). Soon after, Covid-19 began to wreak havoc and the devastating effects of the pandemic forced the WHO to declare it as a global pandemic (Guan et al., 2019; Zhu et al., 2020; UNDP, 2020). Afterwards there was a declared global pandemic by the World Health Organization (WHO) by March 2020. However, compared with the SARS-CoV that caused an outbreak of SARS in 2003 (Ksiazek et al., 2003), Covid-19 has a stronger transmission capacity (Horby et al., 2020). As of June 23 2020, infections had risen to 9.1 million and over 472 700 deaths associated with the disease globally (Dong et al., 2020).

The symptoms for Covid-19 can fever, coughing and shortness of breath (WHO, 2020). In severe cases, infection can cause pneumonia and breathing difficulties and the disease can be fatal. Covid-19 symptoms are similar to the flu or the common cold, which is a lot more common than Covid-19 hence the need for testing to confirm if someone has Covid-19. The virus is transmitted through direct contact with respiratory droplets of an infected person generated through coughing and sneezing (Nishiura et al., 2020). Individuals can also be infected from touching surfaces contaminated with the virus and touching their face (e.g. nose, eyes and mouth). The Covid-19 virus survive on surfaces for several hours, but simple disinfectants can kill it (Nishiura et al., 2020). Older people, and people with chronic medical conditions, such as diabetes and heart disease, appear to be more at risk of developing severe symptoms (Lloyd-Sherlock et al. 2020). As this is a new virus, its impact on children is still being investigated, however, there are few cases of Covid-19 related deaths reported among children (Lee et al., 2020).

At present, with no antivirals to cure Covid-19 infections, several drugs have been proposed to treat patients including remdesivir, lopinavir, emetine, chloroquine, dexamethasone, etc. with many at clinical phase (Costanzo et al., 2020) owing to their antiviral activities *in vitro* (Choy et al., 2020). Moreover, synthetic corticosteroids have been recommended to treat severe cases of Covid-19 (Horby et al., 2020) with their treatment use accounting for up to 50% (Wang et al., 2020) and found to aid striking recovery for patients on ventilators, and, good improvement to those receiving oxygen but not on ventilators with concomitant 20% death reduction (Horby et al., 2020). As with other respiratory infections like the flu or the common cold, public health measures are critical to slow the spread of illnesses. These preventative measures which are related to the need for changes in social

behaviour include: self-isolation when sick or having been in direct contact with a confirmed case; covering mouth and nose with flexed elbow or tissue when coughing or sneezing. There is also need to dispose of used tissue immediately; washing hands often with soap and water; social distancing; wearing a face mask and frequently cleaning touched surfaces and objects.

2. Impact of Covid-19 on universities

In order to contain the disease in the face of uncertainty over its spreading and a lack of adequate vaccines, many countries across the world were forced to impose restrictive lockdowns specifically targeting high population volume events which were potential spreaders. Universities were not spared from these closures with many universities being forced to shut down in the middle of the academic calendars. For many universities this resulted in the cancellation of in-contact lectures, cancellations of graduation ceremonies, evacuating residences and denying postgraduate students access to lab facilities.

2.1 University closures

In March 2020, the University of Zimbabwe became the first large university in the country to close its doors because of coronavirus. The universities cancelled face to face classes for its students and are having students take their exams remotely. Soon after, universities across the country followed suit. While each university have confronted Covid-19 differently, many of the students mentioned a typical pattern: rumours, followed by emails followed by panic, despite the universities administrators' best efforts. Later, the universities announced that they would be going online and gave students time to evacuate their residences.

2.2 Logistical difficulties

As students were forced to leave university, many faced logistical difficulties as they suddenly had to struggle to pack their things and find a new place to live if they could not just return home. Some universities provided additional support to students during this transition, offering free shuttle rides to the airport and refunding students for the remaining cost of their room and board. Other universities have made exceptions for students who cannot easily travel.

2.3 Intensifying inequalities

Indeed, for students who are housing or food insecure, universities closures have made these issues even worse, as they struggle to find alternative living situations. The long-term effects are kind of hard to know, but in general, when you have vulnerable populations and emergency hits them, it tends to make their life situation worse. Universities also feared that students who were struggling to stay in university before the pandemic will drop out completely.

2.4 An entirely new educational experience

Perhaps the biggest change to the lives of university students has been to their educational experiences. Lecturers could already tell from a few Zoom classes that they are not going to be the same quality of education they used to have and the small discussion-based classes they are accustomed to. Since the nature of their education has changed, many students were asking for their fees back, have signed petitions calling for partial tuition refunds and also indicating that they do not have access to internet facilities. Students were still paying huge fees for an online education that typically costs.

2.5 Impact on final year students

Universities closures have had a significant emotional impact on students, especially those set to graduate. Students had to say goodbye to a lot of their friends much quicker and under much different circumstances. It was unclear to whether graduation ceremonies will be held. However, the only comfort was the idea that this was something that probably every university senior in the country was going through in one way or another. Students realized that it's probably the right thing for universities to do and to be especially safe but it's devastating senior students had to abort my university experience on this really sad note.

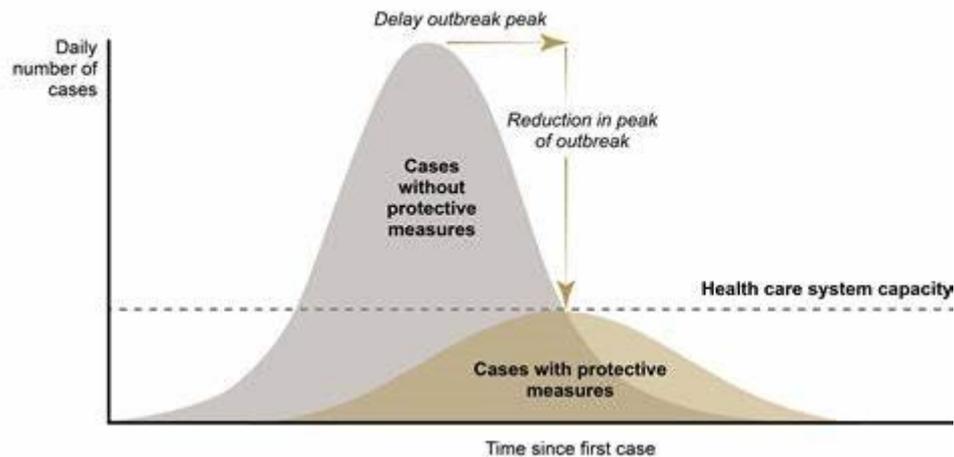
2.6 Job prospects

University students were focused on their professional lives after university and were now preparing to enter the workforce. A lot of people are talking about what it's going to be like graduating into a depression, which is what it's looking like, because of the pandemic, job search has become even harder. It feels like even fewer companies are looking to hire.

2.7 Overall optimism

Despite all of this, university careers cut short, financial difficulties and professional woes, the students remained with extraordinarily resistant. It was important to remember that we are not the only ones and this was a temporary inconvenience. Before the outbreak of the Covid-19 pandemic, the world was already dealing with the learning crisis, evidenced by high levels of learning poverty (World Bank, 2020). The spread of Covid-19, among several disruptions to normal life, necessitated more than 160 countries to effect temporary closure of universities. WHO estimates that the closure of universities has left 1.6 billion children and youth out of universities (Mhlanga and Moloi, 2020). The United Nations Educational, Scientific and Cultural Organization (UNESCO) are also currently tracking the impact of the pandemic on education (Jacob et al, 2020). Initiatives are being proposed world over in order to flatten the curve as indicated in Figure 1 in universities worldwide.

FLATTENING THE CURVE



Source: CDC

Figure 1. Conceptual framework on the need of protective measures to minimise Covid-19 infections

In Zimbabwe, government was forced to enact a national lockdown, which resulted in the total closure of all universities. This resulted in a halt to the university learning process. There was a general concern among some in society that the widespread universities closures led to loss of learning, loss of human capital and weakened economic opportunities (Mhlanga and Moloji, 2020; Jacob et al, 2020). Across the world, universities cancelled face to face instruction and moved to remote learning and teaching (Di Pietro et al, 2020). Although the adoption of these interventions was key to ensure the continuity of education following the physical closure of universities, students were likely to experience a learning loss during the lockdown. This has been assumed to be due to some of the following arguments: quarantined students tend to spend less time in learning compared to when universities are open, many students confined at home due to Covid-19 may feel stressed and anxious and this will negatively affect their ability to concentrate on universities work and lastly physical universities closure and the lack of face to face contact may make students less externally motivated to engage in learning activities. The other challenges the students face include:

Absence of access to devices: Online learning requires students to have access to up to date electronic devices that are capable of supporting the various software used by universities. These are not readily available with the majority of students from poorer backgrounds not having access to a smart phone or a laptop.

Costly cost of data: Where devices are available, the cost of data is out of reach to many students. Online activities such as live classes, streamlining of webinars or even downloading pre-recorded lectures are data intensive.

Lack of proper online infrastructure: Technological advancement in most Zimbabwe universities is still limited. The majority of the institutions are yet to procure the rights to use world renowned learning systems such as Blackboard (Bradford et al, 2007).

Inadequate training and support to lecturers: Online learning came as a new normal to everyone. The lecturers and students had to learn and adjust, losing learning time in the process.

Load shedding: Due to the routine electricity shortages that are affecting the country.

Insufficient living activities: These arrangements make it difficult for students to write online assessments

Since Covid-19 is a new existence, investigations on its real effects across many sectors of our day to day lives are still on-going. Zimbabwean universities were not spared from these disruptions. To date, all universities in Zimbabwe have closed their universities in response to the virus, choosing to move classes online. The research objective of this study was therefore to determine the impact of Covid-19 on Zimbabwean universities with reference to Harare Institute of Technology students. The main research question to be answered was: Did Covid-19 affects the performance of Zimbabwean universities with reference to students at Harare Institute of Technology? With the following secondary research questions: Will the Covid-19 pandemic delay students from graduating in time? Has the quality of learning been influenced by crossing over to online lectures? Are universities ready for students in the new Covid-19 normal? The research assumptions were students were affected by the Covid-19 pandemic. The purpose of this study was therefore to understand the impact of Covid-19 on universities and map way forward on the new normal with reference to Harare Institute of Technology. The significance of the research was to identify the new normal during Covid-19 pandemic and how universities can continue to grow in those circumstances.

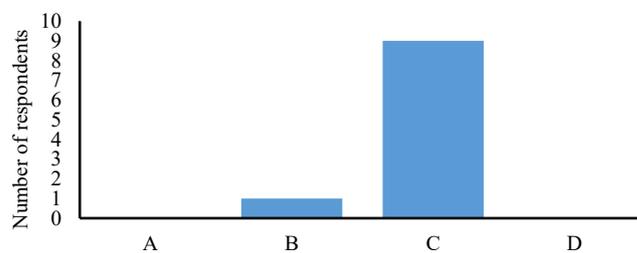
3. Research Methodology

The research philosophy was based on the fact that Covid-19 is a new disease which is still on-going and has long term impacts on students that are still to be studied. The study focused on analysing the impact of Covid-19 on universities in Zimbabwe. Harare Institute of Technology was chosen as the University of study with a questionnaire designed to collect and evaluate the effect of Covid-19 university students and to come up with measures not to affect the educational system thereof. The responses from the questionnaire were analysed using Microsoft Graphs. A sample of 10 students from Harare Institute of Technology at various stages of learning was used in this study. The data collection for the impact of Covid-19 on students at Harare Institute of Technology was collected using a designed questionnaire as attached in Appendix 1. The questionnaire had 12 independent questions that looked at the impact of Covid-19. The study was limited to students only based at Harare Institute of Technology. The study did not cover all aspects of the university system but only focused on the students but not staff and the administrators. The assumptions were that all students were affected by Covid-19 one way or the other. Confidentiality was considered during the data collection from the questionnaire. The data was collected solely for academic purposes.

4. Results and Discussion

4.1 How has Covid-19 pandemic affected your university?

From the study, 90% of the respondents indicated that their university was usually open but containment measures had been put in place to avoid spread of Covid-19



- A. Our university is open as usual, no special measures in place for Covid-19
- B. Our university is open as usual, but containment measures have been put in place to avoid spread of Covid-19
- C. Our university is partially open, but there are major disruptions
- D. All campus activities have stopped and the university is completely closed.

Figure 2. Effect of Covid-19 on university opening

4.2 Do you have infrastructure in place to easily communicate with other students for updates and information?

From the study, 90% of the respondents did not have infrastructure in place to easily communicate with other students (Figure 3).

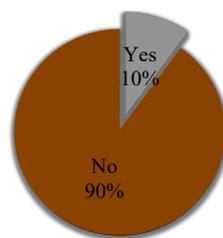
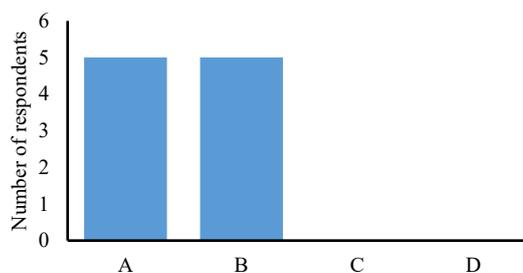


Figure 3. Availability of infrastructure to easily communicate with other students

4.3 Do you believe Covid-19 will affect enrollment numbers for the new academic year?

From the study, 50% of the respondents indicated that Covid-19 will not affect the 2021 academic year, whilst 50% indicated that only international students are likely to be affected (Figure 4).



- A. No
- B. Yes, but only for international students
- C. Yes, but only for local students
- D. Yes, both for local and international students

Figure 4. Effect of Covid-19 on student enrolment

4.4 Has your Government indicated it will support your university with regard to the disruption Covid-19 is causing?

From the study, 90% of the respondents indicated Government would support with regard to the disruption Covid-19 is causing whilst 10% indicated that they did not know. This shows that Covid-19 is everyone's problem and policy makers would like the universities to continue uninterrupted (Figure 5).

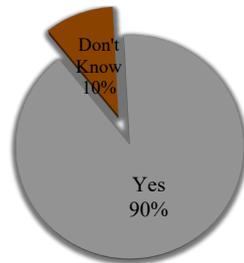


Figure 5. Support by Government towards Covid-19 to universities

4.5 What kind of support has your Government offered your university with regard to the disruption Covid-19 is causing?

From the study, 50% of the respondents indicated the Government offered financial support for expected income losses (Figure 6).

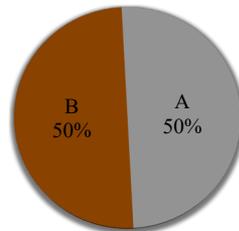


Figure 6. Types of support offered to universities by Government

4.6 How has Covid-19 affected teaching and learning?

From the study conducted, classroom teaching has been replaced by distance teaching and learning. Most activities are currently suspended but the university is working on developing solutions to continue teaching and learning, through digital or self-study means.

Has there been an impact of Covid-19 on international student movement?

From the study, 100% of the respondents indicated there had been an impact of Covid-19 on international student movement. This has been due to the travel restrictions and lockdowns announced and implemented worldwide (Figure 7).

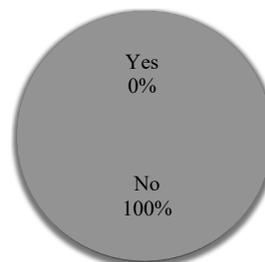


Figure 7. Impact of international student movement during Covid-19 pandemic

4.7 What is the impact of Covid-19 on international student movement?

From the study, there was an indication that international students were either grounded at the Harare Institute of Technology or at other international universities where they were using the other universities facilities. 50% of

the respondents indicated that international students were grounded at the university while another 50% indicated they are grounded at other universities (Figure 8).

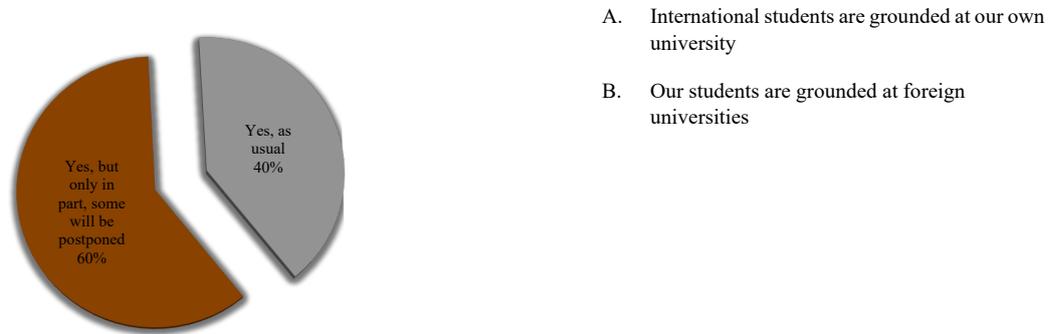


Figure 8. Places of grounding for international students due to Covid-19

4.8 Has Covid-19 stimulated alternatives to physical student movement?

From the study, 80% of the respondents indicated that Covid-19 stimulated alternatives to physical student movement (Figure 9). These alternatives can include the adoption of online lessons.

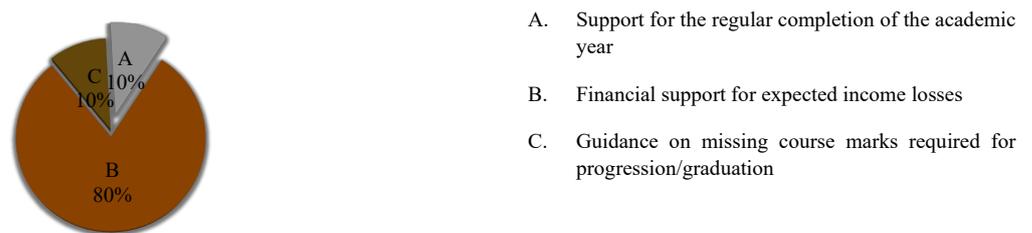


Figure 9. Stimulation of alternatives to student movement during Covid-19

4.9 Do you expect to be able to carry out exams as planned for this semester?

From the study conducted, 60% of the respondents expected some exams to be cancelled (Figure 10). This can be due to the fact that some exams especially from the engineering faculty are practically oriented and may need time to be re-organized.

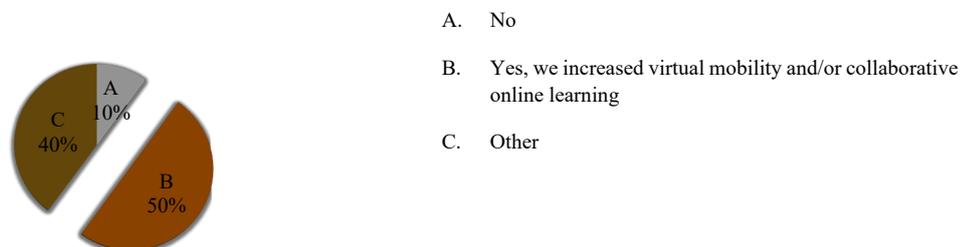


Figure 10. Potential to carry out exams for students in the Covid-19 era

4.11 Is your university involved in Covid-19 research?

All respondents indicated their universities were involved in Covid-19 research. The various researches will allow in the production of saniters, masks and other Covid-19 essentials resulting in universities being continually relevant.

5. Conclusion

The effect of Covid-19 on universities poses a lot of challenges to universities and requires a lot of adjustments. Measures should be taken to ensure that students will be able to make up for the learning loss they experienced during the lockdown. Alternative methods of delivering teaching and learning including a mixed learning system with physical and online elements should be put in place. The future of university education it requires a change in both the quantity and quality of the teaching capacity, a revision in the curriculum and the structure of many existing university buildings to maintain physical distancing. Guaranteed access to internet, availability of electronic gadgets, increased access to fast internet and proper ICT tools are basic fundamentals in universities during and post the Covid-19 era.

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APPENDIX 1: QUESTIONNAIRE: IMPACT OF COVID-19 ON UNIVERSITIES: CASE STUDY OF HARARE INSTITUTE OF TECHNOLOGY STUDENTS

GENERAL INSTRUCTIONS FOR FILLING THE QUESTIONNAIRE

It is assured that the data provided by you shall be used only evaluating the extent to which COVID-19 has affected university education in Zimbabwe. The data furnished and the identity of the respondent will be kept confidential.

1. Please fill in all the following questions in the questionnaire
2. All questions carry equal weightage
3. Please answer all questions by ticking one chosen answer.

A. General information

Name of Student:

Year:

B. General assessment of Covid-19 impact on your university

1. How has Covid-19 pandemic affected your university?
 - A. Our university is open as usual, no special measures in place for Covid-19
 - B. Our university is open as usual, but containment measures have been put in place to avoid spread of Covid-19
 - C. Our university is partially open, but there are major disruptions
 - D. All university activities have stopped and the university is completely closed.
2. Do you have infrastructure in place to easily communicate with other students for updates and information?
 - A. Yes
 - B. No
3. Do you believe Covid-19 will affect enrolment numbers for the new academic year?
 - A. No
 - B. Yes, but only for international students
 - C. Yes, but only for local students
 - D. Yes, both for local and international students
5. Has your Government indicated it will support your university with regard to the disruption Covid-19 is causing?
 - A. Yes
 - B. No
 - C. I do not know
6. What kind of support has your Government offered your university with regard to the disruption Covid-19 is causing?
 - A. Support for the regular completion of the academic year
 - B. Financial support for expected income losses
 - C. Guidance on missing course work required
7. How has Covid-19 affected teaching and learning?
 - A. It is not affected classroom teaching has been replaced by distance teaching and learning. Most activities are currently suspended but the university is working on developing solutions to continue teaching and learning, through digital or self-study means.
 - B. Teaching has been cancelled
8. Has there been an impact of Covid-19 on international student movement?
 - A. Yes
 - B. No
9. What is the impact of Covid-19 on international student movement?
 - A. International students are grounded at our own university
 - B. Our students are grounded at foreign universities
 - C. International students have decided to interrupt their study programmes
 - D. Student exchanges with some countries have been cancelled
 - E. All student exchanges have been cancelled
10. Has Covid-19 stimulated alternatives to physical student movement?
 - A. No
 - B. Yes, we increased virtual movement and/or collaborative online learning
 - C. Other
11. Do you expect to be able to carry out exams as planned for this semester?
 - A. Yes, as usual
 - B. Yes, but through new measures
 - C. Yes, but only in part, some will be postponed
 - D. No, the majority of exams are at risk of being postponed
 - E. No, all exams are on hold
 - F. I do not know
12. Is your university involved in Covid-19 research?
 - A. Yes
 - B. No