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The Impact of Covid-19 on the Education Sector in Zambia: A Case Study on DMI-St. Eugene University

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Abstract

COVID-19 pandemic has left the largest disorder in education systems in history; these affected more than 3.6 billion learners in more than 200 countries. Suspending of physical learning of colleges, institutions and universities have impacted more than 95% of the world's learner's population. This has brought changes in all aspects of our usual education systems. Social distancing, mask-up and restrictive movement policies were put in place by several governments that have considerably interrupted ancient instructional practices. Re-opening of learning establishments and universities after relaxation of restriction is another ultimatum with many new standard operating systems and procedures that will be put in place.

Since late 2019 after discovering the COVID-19 pandemic, several researchers have shared their findings on teaching and learning practices. Many colleges, faculties and universities have abandoned face-to-face teaching and learning practices. We tend to might lose the 2021 academic year or perhaps additional within the coming future. This recommends we'd like to introduce and implement different educational systems and assessment ways during which learning and teaching will continue however additionally putting in place the mitigation to fight against the pandemic. The COVID-19 pandemic has given us an opportunity to introducing and improve digital learning and teaching systems to the very best level as never been before. This analysis aims to provide a radical report on the impact of the COVID-19 pandemic on the education sector in Zambia, specifically at DMI-St. Eugene University.

Keywords: COVID, Education, Establishment, Students.

Introduction

The world deems education as a basic right and, therefore, the basis for creating peace, harmony, national progress and property development (UNESCO, 2018). This intense conception is equally argued and proclaimed by the Southern Africa Development Community (SADC) – a regional body to which Zambia is a member. Although, the COVID-19 international pandemic has caused afflictions to the anticipation of a brighter future for the education sector globally significantly in Zambia. The acronyms COVID-19 merely stands for Corona-virus disease discovered in 2019. COVID-19 could be a metabolic process of infective agent sickness transmitted through droplets of an infected person once s/he sneezes or coughs. In response to the current pandemic, the general public health and as mandated by the general public Health Act Cap 295 of the Laws of Zambia and as directed by 2 Statutory Instruments, SI twenty-one and SI twenty-two, each issued on 14th March 2020, the govt of the Republic of Zambia through the Minister of Health,

on 17th March 2020, seriously issued an untimely closure notice of all colleges, schools and universities in Zambia with effect from Friday, twentieth March 2020 as to mitigate the supersonic spread of COVID-19. During the SIs invocation, COVID-19 was reported to outspread to 162 countries altogether with 181,335 cases and 7,131 deaths globally (Ministry of Health Press Statement, 17th March 2020). By the halt notice that the Ministry of higher education Authority (HEA) accomplished and actualised to any or all learning establishments as per their circular dated 18th April 2020, all colleges and universities were to leave college premises to their numerous homes in compliance.

Background of the Study

The study was exploratorily incorporating a qualitative paradigm and concerned semi-structured key informant interviews of three districts, provincial and HEA headquarters education officials in addition to DMI-St. Eugene University students and staff, in different academic establishments via phone calls; six employees from the University of Zambia were contacted; observation of the tutorial programs through zoom or net typically, table reviews and knowledgeable analysis. Random and purposive sampling was the standards concerned to make sure sample representativeness and thus validity, dependableness and generalisation of findings. The findings converged factually that COVID-19 had a huge terrible impact on the standard of general education of the world as a full. However, would greatly dwindle the already average educational performance of learners in higher learning establishments.

Among the important views publicised by interviewees was the fact, though online learning and teaching programs was from initiation clogged with barriers of accessibility by several learners as not all homes had net access for online materials, it was additionally found that in most parts of the country electricity wasn't offered systematically. Besides, the program had reduced contact period per subject and didn't cowl the curriculum because it wasn't physical teaching and learning. Further, the materials for learners with disabilities were at the time not created and offered. This online learning

lacked interactions and experientialism to facilitate learner attention, material retention, assimilation and absorption.

Statement of the Problem

Very little or virtually no documented educational literature out there regarding the Coronavirus as even the physicians within the medical fraternity globally are still concerned in rigorous laboratory tests to establish cure and, therefore the actual transmissions of the malady. This study is being distributed once the malady toll and death cases are sharply rising to 1.492 in Zambia.

The closure of academic establishments thanks to preventive measures against unfold of COVID-19 has affected the education, well-being, and functioning of all parties concerned and benefiting academic systems within Zambia. Whereas the process of shifting learning to a foreign or online format has already become a part of several academic establishments in several different of the planet, variety of factors associated with the standard of academic establishments, teachers, parents and students, in conjunction with changes to their emotional states are assumed to be causative factors that will affect the standard of remote or on-line learning, teacher performance, student knowledge and skills. The aim of this study is to explore and describe the considerations of scholars, parents, and academics associated with researchers related to the circumstances caused thanks to social isolation, and therefore the views of academic researchers and parents concerning remote or online learning.

Objectives of the Study

Main Objective

To explore the eminent 2020 impact of COVID-19 on education in Zambia, specifically on DMI-St. Eugene University.

Specific Objective

- To assess the attention levels of COVID-19 amongst students and employees.
- To investigate the impacts of COVID-19 on the 2020 learners' educational program at DMI-St. Eugene University.
- To critique the effectuality of an online introduced

education platform in response to academic establishment closures.

- To explore the impact of the COVID-19 pandemic on the funding of education programs.
- To explore the effectiveness of the strategies taken by the University to manage the Covid-19 outbreak.
- To suggest applicable measures that ought to be adopted to manage COVID-19 negative impacts on education.

Research Questions

Specific Objectives	Research Questions
To investigate the potential effects of COVID-19 on the 2020 learners' educational performance in end semester examinations at DMI-St. Eugene University.	What are the potential effects of COVID-19 on the 2020 learners' academic performance in end semester examinations at DMI-St. Eugene University?
To critique the effectuality of online introduction as an alternative education platform in response to COVID-19 academic establishments closures and its impact on examination results.	What was the effectiveness of an online introduced alternative education platform in response to COVID-19 school closures and its impact on examination results?
To explore the impact of the COVID-19 pandemic on the funding of education programs.	What are the impacts of the COVID-19 pandemic on the funding of education programs?
To investigate, however, the COVID-19 pandemic promoted the utilisation of online platforms on delivering education on the amount that has ne'er been before.	How did the COVID-19 pandemic promote the utilisation of an online platform on delivering education on the amount that has ne'er been before? To explore and suggest applicable measures to implement that may facilitate learners to complete the curriculum.
To explore and suggest applicable measures to implement that may facilitate learners to complete the curriculum.	What applicable measures to implement that may facilitate learners to complete the syllabus?

To suggest applicable measures that ought to be adopted in response to COVID-19 negative impacts on education.

What are the measures that ought to be adopted in response to COVID-19 negative impacts on education?

Significance of the Study

The findings of this study will rebound to the benefit of society, especially DMI-St. Eugene University considering that access to quality education is a basic human right and it is the foundation of development in any society. The fact that well-being plays a part in quality education proves that COVID 19 pandemic is a serious and barrier to access education. As COVID 19 is a highly infected disease, this research will recommend the appropriate measures to be taken for the safety of society but also considering that education is essential to human development and life.

Thus academic institutions that apply the recommended approach derived from this research will be able to deliver high quality of education and fight the negative effect of COVID 19 negative impact on education. Administrators will be guided on what should be emphasised by teachers in the school curriculum to improve student's performance in exams as well as understanding the material contents of the syllabus. Teachers also will understand the proper use of online learning platforms for better delivery of quality education. In this research, students will benefit from the sense of proper understanding and improve their learning tactics as they might remain in self-isolation. For the researcher (or researchers if it is a group study), the study will help them uncover critical areas in the educational processes that many researchers could not explore. Thus a new theory of learning through any pandemic period may be arrived at.

Scope of the Study

This research was conducted to identify the impact of COVID 19 on the education sector in Zambia, specifically at DMI-St. Eugene University and to outline strategies and recommendations to be taken in the aim of managing them effectively. Furthermore, this study explores positive strategies as a professional in greater depth using analysing the principles and practices involved.

Topics to be discussed involve the impact of the COVID 19 pandemic on learners at DMI St Eugene University, members of staff as well as the whole country in general. We will also discuss how it has impacted the funding of the education sector and how it promoted online education programs in a mean it has never been before. Furthermore, we will also discuss the impact of COVID 19 on end semester examinations.

Literature Review

There is presently little literature on COVID-19 about education. The sole literature is directly associated with medical studies.

This can be not as a result of education isn't directly stricken by the impact of the COVID-19 pandemic; however, as a result of studies in education seldom incorporate effects of sickness on the effective provision of education to learners across the world. The speed at that COVID-19 has apace been spreading has made each sector of human life to right away feeling its impact.

Medics are within the laboratories attempting to seek out a medical answer to the present pandemic. Economists' as well are engaged in ways that of managing the economic impact of this pandemic on country economies as a result of businesses being urged to closing down and there are restrictions on human quality at intervals and across borders (Kraemer et al., 2020). A virus that appeared within the Chinese region of Wuhan amazingly unfolded thus quick across China and different parts of the globe.

Global Review

The world coronavirus cases rise to 177,885,850 and deaths of 3,850,529 at the time doing this analysis, variety of numbers that are extremely increasing considering new infections. However, 162,395,175 are recovered from the infection. The COVID-19 world pandemic has caused much misery to the prospects of a brighter future for the education sector globally. The rise in legal and restrictive measures arising out of COVID-19 is proportional to the expansion of the pandemic itself.

Though the measures affect all industries, several have direct implications and relevancy on the

healthcare and life sciences sectors. Whereas some industries and services were forced to shut down, higher learning establishments and universities were shut down as well and compelled to work through on-line platforms because the society was in isolation, organisations within the healthcare and medics are pushed to figure out even tougher, pioneer quicker, collaborate and associate in nursing as for resilient at an unprecedented pace.

Such measures aim to assure provisions of medicines and medical devices in their residing places, in addition to accelerate R&D through incentives. Whereas the pandemic has placed some clinical trials in hazard, several jurisdictions are currently passing special laws to safeguard patients whereas making certain that current trials will continue through obligatory licensing or forced cooperative producing arrangements. Several countries have adopted specific measures to broaden access to telemedicine, a trend expected to survive and grow well on the far side of the pandemic.

Regional review

COVID-19 cases in Africa are rapidly increasing. There are currently quite 5,156,126 cases of COVID-19, with over 136,326 deaths. As of 21st July 2020, the accumulative variety of COVID-19 cases within the region surpassed the 13,000 marks. The entire variety of deaths exceeded 4,000 and was reportable in 44 countries, giving a total case fatality ratio (CFR) of 2.4%. 3 countries, together with Eritrea, Seychelles and Uganda, have registered few COVID-19 connected deaths since the start of the pandemic.

Countries within the region have additionally determined augmented incidences of importation of cases from acted countries, mostly oil-fired by long-distance truck drivers and unregulated movement through porous borders.

Research Gap

This research is based on the impact of covid-19 on education sectors in Zambia; this is an exception as there are little researches on the impact of covid-19 on Zambian education, especially higher learning institutions. This research will also critique the effectiveness of the online learning platform introduced as a response to the closure of schools.

In addition, the findings from this study will be useful to policy planners and academicians on how they can mitigate the impact of COVID-19 at the university level.

Research Methodology

Research Design

The research design employed in this analysis was the descriptive design that accurately portrays the characteristics of the development. The descriptive design aims to accurately and consistently describe a population, scenario or development. It will answer what, when, where, once and the way queries, however not why queries.

A descriptive design style will use a good type of quantitative and qualitative ways to research one or additional variables. In contrast to experimental analysis, the researcher doesn't manage or manipulate any of the variables; however, solely observes and measures them. Descriptive design is an acceptable alternative once the analysis aims to spot characteristics, frequencies, trends, correlations, and classes.

The Population of the Study

Currently, there are more than 70 higher learning institutions across the country, with many scholars. Because there are a large number of students and staff across the country, this research will focus on DMI-St. Eugene University students and staffs members.

Sampling Procedure – Stratified Sampling

Simple random sampling is chosen as the basic technique where we select a group of students and staff members from each department. Each individual is entirely chosen by chance and each member of the population has an equal chance of being included in the sample. Every possible sample of the given size has the same chance of selection.

Sample size

The aim of calculating a sample size from the data is to measure the characteristics; I did proportionate stratified random sampling. According to Taro Yamane on the introductory analysis of statistics demonstrated the following formula to determine the sample size (Yamane, 1967).

$$n_0 = \frac{N}{1 + Ne^2}$$

n_0 = sample size.

N=the total target population sampled

e=Acceptable sampling error

NB: Based on 90% of the confidence level and e, which is acceptable, sampling error corresponds to 10% or 0.1.

The number of students and staff was 796 and 50 respectively when doing this research. The university has 6 departments: the computer science department, science and humanities department, social work department, food and nutrition department, management and commerce department, education department and administration. We get a sample size n_0 as follow:

$$n_0(\text{ for students }) = \frac{N}{1 + Ne^2} = \frac{796}{1 + 796 \times (0.1)^2} \approx 89$$

$$n_0(\text{ for staff }) = \frac{N}{1 + Ne^2} = \frac{48}{1 + 48 \times (0.1)^2} \approx 32$$

Sampling Area

DMI-St. Eugene University is a multi-campus private university in Zambia affiliated with the Roman Catholic Archdiocese of Lusaka. The university is administered by the Daughters of Mary Immaculate. The university maintains three campuses: The first campus to be established is the Lusaka Campus, also referred to as the Woodlands Campus. It is located approximately 15 kilometres (9 mi), north of the central business district of Lusaka, the nation's capital city, along T2 Road. The second campus is in the town of Chibombo, approximately 100 kilometres (62 mi), by road, north of Lusaka, along the T2 Road.

Figure 1: DMI-St. Eugene University, Zambia



Sources of Data Collection

Primary and Secondary

In this research, observation, questionnaires and interviews were used for the collection of primary data. I also collected Secondary data usually represented through publications, reports, scientific journals, books, Theses, Conference reports; Company reports or government publications. Secondary data is the most influencing technique in the quantitative method (Rahi, 2017). In this research, we have been consulting various published and non-published materials.

Methods of Data Collection

The way involved to get information depends on a wide range of techniques and standardised schedules (Jupp, 2006). Moreover, secondary data collected from various institutions, both public and private, field observation, interviews and a household survey was used to collect data needed in this research.

Primary Data

In this research, we obtained primary data by field observation, interview and questionnaire.

Field Observation

Field observation helps the researcher to get basic background information necessary to define a hypothesis and to differentiate independent and dependent variables. There are six stages of field observation techniques: choosing the site for research, gaining access, sampling, collecting data, analysing data and existing spatial data (Tayie, 2005).

Questionnaire Survey

In this research, a questionnaire was designed primarily To explore the eminent 2020 impact of

COVID-19 on education in Zambia, specifically on DMI-St. Eugene University following the premature closure of all schools. The administration of questionnaire survey was done by using typed questions on peppers and Google form questionnaire for those who can access the internet.

Tools for Data Collection

Questionnaire Survey

In this research, a questionnaire was designed primarily To explore the eminent 2020 impact of COVID-19 on education in Zambia, specifically on DMI-St. Eugene University following the premature closure of all schools. The administration of questionnaire survey was done by using typed questions on peppers and Google form questionnaire for those who can access the internet.

Tools for Data Analysis

In this design, SPSS was chosen as a major information analysis tool. It's short for applied statistical Package for the Social Sciences, and it's employed by numerous forms of researchers for advanced statistical information analysis.

The SPSS code package was created for the management and applied statistical analysis of science information. It was originally launched in 1968 by SPSS INC. and was later acquired by IBM in 2009.

Officially dubbed IBM SPSS Statistics, most users still talk it over as SPSS. Because the world is customary for scientific information analysis, SPSS is wide in demand due to its easy and English-like source language and imposingly thorough user manual. SPSS is employed by market researchers, health researchers, survey firms, government entities, education researchers, promoting organisations, information miners, and plenty more for the process and analysis of surveyed information.

Limitations of the Study

As the study participants belong to DMI-St. Eugene University from a single private-sector university in Zambia, therefore the findings are only applicable to similar contexts. For generalising, a survey based on our findings should be conducted across the province or country. Despite the limitations, the findings

offer an understanding of the impact of a covid-19 pandemic on educational institutions in Zambia, most specifically on higher learning institutions. It will also offer recommendations for improvement in online learning, which is the need of this pandemic period as we avoid spreading the virus.

Discussions of Findings

I was based on methods used to collect data such as questionnaire survey, structured interview, field observation, literature review and responses to the questions. The discussions of findings were based on the objectives of this research.

To Assess the Awareness Levels of COVID 19 amongst Students and Staff

All the respondents reported that they know what COVID-19 and this represents 100%. If they are confident that they have sufficient knowledge about how covid-19 is transmitted, all the respondents reported that they are confident that they have sufficient knowledge about how covid-19 is transmitted. According to their main sources of information about Covid-19, the results shows that 9.1% reported Radios, 81.8% reported the Internet and 9.1% reported the television.

According to the main ways to prevent Covid-19 and 36.4% reported Social Distancing, 63.6% reported masking. The respondents, according to how frequently they put on a mask the results shows that 54.5% of the respondents put on the mask frequently and 45.5% wear the mask sometimes.

According to the reasons why other people did not put on a mask and 9.1% indicated that it's because they feel safe from COVID-19, 72.7% feel mask makes them feel uncomfortable and 18.2% reported that they don't have access to a mask. The respondents according to how they can rate the University adherence to Covid-19 preventions guidelines. The results show that 54.5% were very satisfied, 36.4% were satisfied, and 9.1% were not satisfied.

To Investigate the Impacts of COVID-19 on the 2020 Learners' Academic Program at DMI-St. Eugene University

81.8% of the students and staff reported increased skills and knowledge about ICT due to

the implemented online platform in response to the closure of physical class learning approximately. However, the results showed that many students were affected negatively during the pandemic period in the process of learning, as 100% of the respondents reported that their academic programs were destabilised by COVID-19

To Critique the Efficacy of an Online Introduced Alternative Education Platform in Response to COVID-19 School Closures

Regarding if the respondents faced challenges during the online teaching and all the respondents reported that they faced challenges. About where the respondents are focused between learning online or open physical classes, the respondents In terms of focusing on the ongoing lecture, all the respondents preferred learning physically in class.

The distribution of the respondents according to rating the performance of students in their end semester examination. The results show that 72.2% reported that the performance was good and 27.3% reported that the performance was not good. This shows that the online platform implemented as a response to covid-19 was used properly at DMI-St. Eugene University.

To Explore the Impact of the COVID-19 Pandemic on the Funding of Education Programs

Regarding how covid-19 destabilise respondents education funding plan, the results show that 27.3% reported that their funding plan had been much destabilised, and 72.7% reported that their funding plan had been partially destabilised as many business activities were closed during this pandemic period.

This also impacts the institution since anything financial activity did on the regular payment of school fees.

To Explore the Effectiveness of University Strategies to Deal with Covid-19

The respondents according to how they can rate the University adherence to Covid-19 preventions guidelines. The results show that 54.5% were very satisfied, 36.4% were satisfied, and 9.1% were not satisfied.

The distribution of the respondents according to the rate of the overall effectiveness of the teaching

process during the online learning. The results showed that 54.5% reported that it was good, and 45.5% reported that it was poor. This shows that 45.5% of students had difficulties focusing during online classes.

Conclusion and Recommendation

Quality education is a key to the well-being of people in every corner of the world. This recommendation is based on findings from fieldwork carried out at DMI-St. Eugene University as a case study on the impact of covid-19 on education in Zambia.

This study found that the COVID-19 negatively impacted the education sector in Zambia. This study established that students experiencing online learning with COVID-19 pandemic risk were more likely to have poor academic outcomes and progression. Institutions of higher learning and other stakeholders must, therefore, put in place measures to mitigate the negative impact of COVID-19 on the education sector.

Recommendations to Academic Institutions

Before colleges physically re-open, those providing remote learning ought to track which students participated, reach resolute to those that failed to participate, and check out to assist them in re-engaging.

Any government and non-government efforts to encourage learners to come to learning institutions once colleges re-open should be over-inclusive. That is, they ought to even be directed at learners who were excluded from education due to different causes before the pandemic.

The university should keep implementing and monitoring that covid-19 preventive measures are put into action—Mask-up, washing hands with soap or sanitisers and social distancing.

Help students catch up with the incomprehensible topics online as most of them faced challenges to access the web platform. That features a lack of web bundles, network challenges, no appropriate electronic device to access online classes, etc.

Recommendations to the Government of Zambia

Preventing the educational crisis from turning into a generational catastrophe must be a high priority for world leaders and the entire education community.

This can be the simplest means, not simply to safeguard the rights of ample learners, however, to drive economic progress, sustainable development and lasting peace.

Governments ought to prepare instantly to get all learners back at school once Covid-19 is in control regionally with careful public health designing, in line with World Health Organization steering, to forestall and manage the unfold of Covid-19.

Governments ought to offer remedial education for youngsters who were unable to follow distance education and for youngsters who were out of college due to alternative causes before the pandemic.

Governments ought to particularly concentrate on kids most excluded or at risk: together with kids with disabilities, kids living in poverty conditions, exile and migrant kids, kids who work, kids in rural areas, paying specific attention to women inside these teams.

The government ought to ensure that masks and alternative protecting materials are on the market to citizens as some mentioned they don't have access to masks.

Definition of Unfamiliar Terms

- COVID-19: Corona Virus Disease, discovered in 2019
- UNESCO: United Nations Educational, Scientific and Cultural Organization.
- SADC: Southern Africa Development Community
- SI: Statutory Instruments
- HEA: Higher Education Authority
- R&D: Research and Development
- IP: Internet Protocol
- CFR: Case Fatality Ratio
- UN: United Nations
- WHO: World Health Organization.

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