Investigating the Management of COVID-19 Pandemic Risks in Primary Schools: A Case of Public Primary Schools in Lindi Region, Southern Tanzania

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Abstract

The spread of COVID-19 in the year 2020 put various nations at risk, especially in social, economic, and educational aspects. School closure was employed as one of the response measures against the spread of this virus. However, the measure imposed high social and educational risks with consequences of a massive drop academically. This study investigated the management of the COVID-19 pandemic risks in primary schools in the Lindi region in Tanzania intending to suggest the essence of having a risk management plan for indeterminate outbreaks and other uncertainties to avoid the recurrence of the risks. The study adopted a qualitative case study design which allowed an in-depth data collection through one-on-one interviews and observation methods. Thematic analysis was adopted to analyze the data for this inquiry. Findings revealed that the targeted schools were able to manage the COVID-19 pandemic risks even though the management was done locally due to the lack of risk management plans in the schools. Furthermore, it was discovered that there was no budget set to deal with the emerging risks. Headteachers from the investigated schools went as far as using part of their salaries to tackle the emerging risks as a result of school closure. Additionally, findings also revealed that during school closure teachers were unprepared on how to conduct the teaching and learning processes amongst the pupils through distance mode. Despite several endeavors to try to ensure pupils continue to learn in their homes, the strategies were not successful due to inadequate Information and Communication Technology (ICT) knowledge and skills among the teachers, parents, and pupils as well as insufficient supportive distance learning infrastructures such as ICT equipment and the internet. Consequently, proper implementation of distance teaching and learning during school closure was impaired due to the lack of risk management plans in schools. It is recommended that the risk management plan be developed to ensure that teaching and learning processes are never hampered by emergencies.

Keywords: COVID-19, Risk management, Risk identification, Risk mitigation, Risk management plan

1. Introduction

Various governments worldwide including Tanzania adopted school closures aiming at protecting the pupils from contracting the deadly disease, COVID-19. This approach was found to be very effective health-wise as it was a strategy to reduce the chances of transmission and increase safety among the pupils. However, it imposed high social-economic and academic risks for pupils across communities. The risks associated with school closures, however, were particularly severe for the most vulnerable and marginalized learners. These include interrupted learning, parents' unpreparedness for distance and home-schooling, gaps in childcare, increased pressure on school systems, especially on how to cover syllabi, rise in dropout rates, increased exposure to violence, pupils' negative behavioral transformation, increased pupils' exploitation, and social isolation among the pupils (Mustafa, 2020).

1.1 The Incoming of Corona Virus and School Closures

Coronaviruses are a large family of viruses that were first identified in the mid-1960s. They cause illnesses ranging from the common cold to severe diseases such as Middle East Respiratory Syndrome (MERS-CoV), Severe Acute Respiratory Syndrome (SARS-CoV), and COVID-19 which was first detected in Wuhan City in China in 2019. Coronaviruses are common in many different species of animals, including camels, cattle, cats, and bats. During epidemics, they caused up to one-third of the community-acquired upper respiratory tract infections in both children and adults. Human-to-human transmission occurs through respiratory droplets produced when an infected person coughs or sneezes closer to uninfected persons, and when in contact with surfaces contaminated with COVID-19 viruses (Hon et al., 2020). The people infected with COVID-19 show symptoms such as fever, dry cough, fatigue & myalgia, sputum production, headache, hemoptysis, diarrhea, difficulty in breathing, and even death. Tanzanian officials declared the country's first case of COVID-19 on March 16, 2020, and in May 2020, the government authorities stopped publishing COVID-19 case counts. When the reporting came to an end, there were 509 confirmed cases, 183 recovered patients, and 21 patients who had died (Mumbu and Hugo, 2020). The spread of COVID-19, therefore, put various nations at risk, especially in social, economic, and educational aspects. As a result, different countries have experienced economic and educational crises, especially in developing countries, Tanzania included. Governments all around the world have tried to contain the virus by enacting various measures including school closures as well as distance learning in some schools (Covid et al., 2020). By closing schools, pupils were assured of their safety health-wise. Therefore, in response to this global public health pandemic, the Government of the United Republic of Tanzania, through its Prime Minister's office, officially issued a closure notice for all schools, colleges, and universities in the country on March 17, 2020, as a move to control COVID-19's rapid spread. Following the closure notice, all students and pupils in all schools were required to leave the school premises and return to their respective homes.

1.2 The Rationale for the Study

Education is regarded as a fundamental human right and the foundation for achieving peace, unity, national progress, and long-term development by the rest of the world, including Tanzania. Hence, its destruction poses a great crisis in the country (UNESCO, 2018) as cited by Tikly (2019). When schools were closed due to the COVID-19 pandemic, several countries turned to distance learning to compensate for the lost time in continuing education programs (Iglesias-Pradas et al., 2021). Likewise, Tanzania attempted to record and broadcast lessons on radio and television to encourage learners to continue learning during school closures. However, the program was not very successful due to various reasons including inadequate electricity supplies, especially in rural areas, some pupils' physical and mental impairment, and the lack of some parents' and guardians' close guidance, monitoring, and supervision of their children to ensure they follow the lessons on radio and televisions. These have led some pupils to fall at risk of abandoning academic matters and engaging in non-academic activities such as small business, traditional dances, fishing, and interaction with risky groups whose influences transformed pupils' behaviors negatively. As a result,

after the reopening of the schools, the majority of the learners had already forgotten what they had learned before, the consequence of which was a massive drop academically (Pokhrel and Chhetri, 2021). Since no one is sure that such kind of outbreaks or any other uncertainties will not happen, it is necessary to get prepared on how to deal with the uncertainties on time without disrupting educational activities. On this ground, therefore, it was deemed important to investigate the risks imposed by COVID-19 in public primary schools in Tanzania and suggest the essence of having a risk management plan for indeterminate outbreaks and other uncertainties to avoid falling into the same risks in the future.

The purpose of this study was, therefore, to investigate the management of the COVID-19 pandemic risks in primary schools. More specifically, the study aimed to observe, analyze, and interpret the experiences and decisions of head teachers, health & environmental teachers, and parents in the context of the COVID-19 outbreak, particularly during school closures and after they were reopened to come up with recommendations for a long-term risk management plan against COVID-19 outbreaks and other related pandemics. Thus, to attain this, the study's main research question was guided by the following questions: 1) what are the COVID-19 pandemic risks faced by the public primary schools? 2) How are the COVID-19 pandemic risks mitigated in public primary schools?

Despite all the response measures taken against the spread of COVID-19 including school closures in Tanzania, various risks occurred. The prevalence of such risks was due to the lack of risk monitoring guidelines that could enhance the educational system's preparedness to prevent consequences resulting from school closures. In this regard, this study investigated the risks encountered in urban and rural schools in Tanzania to come up with the actual situation of the magnitude of the risks encountered and suggest to the Ministry of Education, to have a sustainable risk management plan. This is because, until recently, there was no single study conducted in Tanzania that looked into the risk management issues, which would guide schools during the outbreaks. Having a risk management plan in schools to deal with unexpected outbreaks or uncertainties was, and still, is deemed crucial.

2. Methodology

2.1 Research Approach and Design

Since the study intended to delve deeper into people's knowledge of COVID-19 risk management processes, particularly in primary schools, a qualitative research approach was found to be appropriate to address the research questions for this study. Thus, the approach enabled the researchers to come up with a deeper understanding of the phenomenon under investigation, as it allows a profound understanding of people's cultures, ideas, and values, as well as human experiences and events (Creswell et al., 2011; Holloway & Galvin, 2016; Munhall, 2012; Wuest, 2012).

The research further adopted a case study design to investigate the school programs and suggest interventions. The design helped the researchers to identify the key elements for designing and implementing the COVID-19 risk management plan in public primary schools. This design is recognized for its ability to gather information or details about individuals,

groups, and/or events that are important to the study's aims and occur in the participants' real-life settings (James, 2014; Yin, 2011; Yin, 2017). Thus, it helped the researchers to dig deeper and intensively investigate the four schools under study to explore their experiences of COVID-19 risk management after school reopening in Tanzania.

2.2 Study Location and Population

This study was done in four public primary schools whose pseudonyms were Mbao, Mwakanga, Kipanya, and Chumvichumvi, located in the Lindi region, in the southern part of Tanzania.

The study involved twelve participants from all four schools under investigation. These included four head teachers (one from each study school), four health & environmental teachers (one from each study school), as well as four parents (one representing each of the schools under investigation). The head teachers were purposively chosen to participate in the study because they are the school leaders who could effectively participate in leadership practices, including decision-making during the COVID-19 risk management process in their respective schools. Hence, the researchers obtained much of their leadership experiences, which were of vital importance to the findings of this study. Furthermore, the health & environmental teachers were also selected purposively based on the fact that they are the ones who were responsible for dealing with health and hygiene protocols in their respective schools. As a result, during the COVID-19 pandemic, the researchers were able to get a full understanding of how schools conformed to health principles. Eventually, the representative parents of the schools under study were also chosen to participate in this study. However, their choice was randomly done to extract their experiences, on how the COVID-19 risks were managed. The information from the parents was found to be of paramount importance to this study because all the pupils from the schools under study, as already introduced, were day scholars who always moved from home to school and back home.

2.3 Methods of Data Collection and Analysis

One-on-one interviews were conducted among the head teachers, health & environmental teachers, and parents. Additionally, the researcher employed observation techniques, including physical observation of the school compound. The latter was done because the formal or informal field notes obtained through it became the ideal approach for the researchers to capture basic events, behaviors, experiences, reactions, and situations of respondents in real time that were of vital importance for the study. Thus, the one-on-one interview was corroborated with observation findings for a deeper understanding of the experiences, perceptions, attitudes, and views of respondents on the topic under inquiry (Alshenqeeti, 2014, as cited by Tolbert-Ireland, 2019).

The data collected through one-on-one interviews were recorded by using a tape recorder to enhance the researcher's capture of all the information as the conversations progressed. Subsequently, the data was carefully transcribed, and the transcript was read several times, to identify codes and establish patterns, which were later organized into themes in line with the research questions for the study. Eventually, findings were narrated as evidence from the

field.

2.4 Ethical Issues

To ensure that the research adhered to the ethical protocols, the researchers in this study secured first the research clearance certificate from the Aga Khan University (AKU) Ethical Research Committee (ERC) and the research introductory letter from the AKU registrar's office, which were then taken to the Regional Administrative Secretary (RAS) of Lindi in pursuit of the research permit. From RAS, the researchers were issued a three-month research permit for the requested areas of research. Thereafter, the permit was sent to the Regional Educational Officer (REO) and Council Directors (CD) via the RAS's official e-mail. The CD introduced the researchers to the District Educational Officers (DED) who then introduced the research team to the Headteachers of the selected schools under investigation via the phone and from there the appointments for data collection were set.

3. Findings

3.1 Risks Encountered During the Implementation of Response Measures

In responding to the question about the COVID-19 pandemic risks faced by the public primary schools following the school closures as a means of controlling the spread of the COVID-19 pandemic, one of the participants, Madam Zubeda had this to share,

"The school closures deprived the pupils of teachers' guidance and control. Since at home also the parents had to go out in pursuit of food and other household requirements…the children became victimized to the extent of some female pupils indulging in sexual affairs that resulted into unplanned pregnancies" [HT4, September 2021].

Moreover, some students came with improper language so much so that it was hard to bring them back to the language of school as noted by Madam Tatu:

"Dah! Improper language was common among the pupils and this was noted immediately after schools were reopened. You could not believe that these were the same pupils we had three months ago before the closure of schools. Most of their conversations were dominated by insults and abusive languages" [HT3, September 2021].

Besides, there were increased cases of truancy as students looked for any possible opportunity to abscond from the school. Students had lost motivation and interest, and this was seen vividly in their turn-up during the school reopening. This was noted during the interview with Madam Halima:

"The pupils' turn-up after reopening was very low as truancy rates increased. Some remained meandering in the streets. It took us some weeks to ensure they returned to school. However, not all returned. The motivation to schooling was low. Some dropped out completely" [HET4, September 2021].

The same was also observed by Madam Teddy:

"During school closures, I could meet some of our pupils selling cashew nuts, and some

others were directly involved in fishing and hunting birds, contrary to the intended aim of closing schools" [HT1, September 2021].

Cultural dances, rituals, and farming activities were other risk activities that students in the Lindi region got involved in. These became alternative preoccupations for the students during the long school break with uncertain re-opening dates. The nature of their home environment would not let them out of these ceremonies, given the freedom that they had after the school closures. Mr. Mutanda noted:

"Most of the time, I regret to say that some female pupils were engaging in traditional dances, rituals, and cultivation when the schools were closed…After reopening, they returned to school while they had forgotten the subject contents. Even simple questions appeared difficult for them" [HET3, September 2021].

There were also issues with syllabus coverage. The school closure happened a few weeks after the beginning of term 1 in which case, teachers had just covered a small portion in their schemes of work. As a result, there was a high risk of failure to cover the syllabus within the required time. And this was noticed in Mr. Heri's sentiments:

"Our school was at high risk in terms of syllabi coverage. Closing schools for three months was something dangerous to the education of our pupils, especially the examination classes, specifically standards four and seven respectively" [HT2, September 2021]

3.2 The COVID-19 Pandemic Risk Mitigation in Public Primary Schools

In responding to how public primary schools were mitigating the risks that emerged from the implementation of response measures like school closures, it was discovered that parental involvement in the process of rectifying pupils' bad behaviors was of great importance. This implies that the process of molding pupils' behaviors especially those who are day scholars can best be achieved through mutual collaboration between teachers and parents. This was reflected in the interview conversation with Mr. Heri who expressed the way his school involved parents in disciplinary meetings as an important component in rectifying pupils' behaviors that had been negatively transformed during school closures.

"In my school, we held disciplinary committee meetings with parents to discuss how to rectify the behaviors of pupils. We succeeded to some extent, especially in reducing truancy, dropouts, and other misbehaviors such as abusive languages" [HT2, September 2021].

Concerning the issue of mitigating the risks associated with syllabi coverage, particularly for the candidate classes in view of avoiding the possibility of low academic performance that was anticipated following the school closures, various strategies were employed from one school to another. Some schools increased working hours to compensate for the lost time when schools were closed. It was reported that this strategy helped teachers to cover the intended educational objectives. In so doing, learners used that precious moment to prepare for their final examinations. This was noted during an interview with Madam Teddy:

"The school closure left us with unforgettable moments. In my school, we decided to add some extra hours in the morning and the evening so that the topics that were not taught could

get time. This helped teachers to push the syllabi before the examination time. Sometimes we taught pupils up to 8:00 pm. It was a kind of crash program, but I thank God, we managed, although it was not an easy task" [HT1, September 2021].

Likewise, in pursuit of the same objective, thus, syllabi coverage, some schools went as far as motivating their teachers by providing them with meals and transport allowances. As teachers' motivation was raised, lessons were conducted smoothly. Teachers worked so hard that the lost time during schools' closure was compensated and pupils reaped the fruits of their teachers' sweat. This was made vivid through the conversation with Mr. Mutanda who had this to say:

"Compensating the lost time was made easy in my school after motivating teachers through lunch and transport allowances. It would be very difficult to retain the teachers from morning to evening without having eaten. So, the increase of extra teaching hours became effective with the provision of lunch. Thereafter, as teachers, we could teach, test, and assess the performance of our pupils without any problem because, at the end of the process, we had the transport allowance that facilitated one to easily reach home late in the evening by simply hiring a motorbike" [HET3, September 2021].

The interdisciplinary approach, leading to accelerated learning strategies was also another approach employed by teachers in some of the visited schools to ensure that all the content areas meant to be covered in class are taught before the examination time. It was revealed that these strategies showed quick positive results and the majority of teachers across the schools adopted them. This is evidenced by the interview conversation with Mr. Kajuna who expressed that:

"Following the training we got from the Aga Khan University intervention program, I still remember the skills we were taught on the application of spiral curriculum and accelerated learning strategies in teaching during times of emergencies. Through the application of accelerated learning strategies, we were able to cover the syllabi within a shorter period than we had expected. That training was very good and it gave us strategies we never thought about before. Various teachers still employ those strategies to date. They save time and increase efficiency. Learners also through accelerated learning and spiral curriculum were able to establish links across various subjects" [HET1, September 2021].

The excerpt from Mr. Kajuna above is an indication that the professional development training that the teachers received enabled them to accomplish the expectations of the spiral design that defines the curriculum they generally used, through the application of interdisciplinary approaches.

There was also a question of mitigating physical and mental health-related risks that would impair the teaching and learning processes. Since some parents were very much worried about the health of their children while at school, the school administrations in most of the visited schools conducted some morning talk daily on parade grounds before the lessons commenced. The talks focused on reassuring pupils that they would be safe and that learning has to continue despite the existence of COVID-19. Various instructions were given regularly

on adherence to hygiene protocols and the use of personal protective equipment. These helped much to release tensions in schools and psychologically the pupils were helped much. These are reflected in Madam Tatu's sentiments:

"In my school, we became like religious preachers. Every morning before beginning the lessons and every evening before we left the school premises, we instructed pupils on how to behave for the safety of the school community. We did whatever we could to counsel them so that they be free from fear of dying of COVID-19. We kept insisting on handwashing and following all the protocols as they concentrated on their studies for the good of their future and their families" [HT3, September 2021].

Furthermore, it was discovered that various schools mitigated the emerged risks differently as there were no common standards to follow across the visited schools. Each school, therefore, tackled the risks according to their perception and resources at their disposal. The variations in mitigating the emerged risks were attributed to the lack of a risk management plan through which risks were to be identified and adequately planned for in advance bearing in mind that the key components of a risk management plan are risk identification and mitigation measures. Due to the absence of such a plan, there were no strategies that were established in advance before school closures that would ensure that learning is not disrupted during school closures; this is said to have played a great role in the emergency of various risks encountered by the visited schools as expressed by madam Zubeda:

"You know, I think we could not have suffered from all these risks if we could have planned for them in advance before closing the schools. We could have identified the risks and planned the budget for implementation" [HT4, September 2021].

Similarly, Madam Teddy had these to say about the mitigation measures:

"Although we suffered nearly the same risks, the way we tackled them was different from one school to another. In this regard, there is no one to blame because the pandemic was something new and it shook the whole world. Since we have the experience of the emerged risks and their associated consequences on education, it is the right time to think of developing a national standard risk management plan for schools in Tanzania. The presence of such a plan will entail a budget for handling emerging risks instead of using our salaries to solve the school issues" [HT1, September 2021].

4. Discussion

This study has revealed the fact that some response measures against the spread of COVID-19, and particularly the school closures, unexpectedly put most learners at risk of being negatively transformed behaviourally. This was manifested by some pupils' use of abusive language in some of the visited schools. These findings are consistent with those of other studies conducted in Japan, Israel, South Africa, and Norway respectively (Augusti et al., 2021; Fouché et al., 2020; Takaku & Yokoyama, 2021; Tener et al., 2021). These studies revealed that responding to the COVID-19 pandemic through the implementation of physical and social distancing, an approach that was accompanied by school closures led some pupils to the risk of negative behavioral transformation. Thus, indulging in drug abuse, anxiety, and

sexual abuse as well as learners' conversations being dominated by insults and abusive languages soon after the reopening of schools.

Furthermore, the findings from this study also disclosed that unplanned pregnancies increased among female pupils during the period of school closures. A study conducted by Unit (2021) in Kenya found similar results, where, misbehaviors and sexual abuse leading to unplanned pregnancies increased among the learners during the period of school closures.

Additionally, the study findings have exhibited that school closures put some pupils at great risk of losing interest and motivation in academic matters. As a result, after the reopening of schools, the causes of truancy and dropouts increased leading to declining academic performance. This is in congruence with some studies conducted in Brazil, India, and Somalia whose findings exposed that truancy and dropouts increased after schools were reopened due to various reasons including pupils' loss of interest in studies as a result of prolonged holidays (Engzell et al., 2021; Lichand et al., 2021; Shetty et al., 2020).

The research findings also discovered that some learners lost interest in academic matters and resorted to engagement in non-academic activities such as small business, fishing, hunting, traditional dances, and cultivation, to mention just a few. This is similar to the results from the study conducted by Schleicher (2020) which showed that pupils engaged in activities other than academics during school closures.

Finally, the study findings unveiled that the schools under investigation were at risk of not accomplishing the intended objectives before national examinations. These findings resonate with another study conducted in England and Nigeria whose findings revealed that the schools experienced learning disruptions during lockdown following the fact that not all pupils had access to the online materials (Kim & Asbury, 2020; Samuel, 2020). However, these findings are in contrast with the results of the study carried out by Ewing and Cooper (2021) in Australia which established that the pupils continued learning through distance learning mode despite the school closures. Hence, there was no risk related to school closures as there were no learning disruptions experienced there.

As for mitigation measures, findings from this study showed that risk management in the schools under study was done locally; no uniformity was portrayed in dealing with the emerging risks as each school tackled its risks in its own style. All of these could be attributed to the lack of a risk management plan that would guide the implementation of COVID-19 response measures. This contradicts the findings from the study conducted in South Africa by Kaplan and Mikes (2016) which states that a risk management plan acts as a revealing hand, identifying, assessing, and mitigating risks in advance in an economical manner; it is a mandatory plan for successful risk mitigation.

The study findings, further, revealed that the school management employed a variety of strategies such as accelerated learning, and increased extra teaching hours after the normal working hours to improve the standard of education post-school closures. This is similar to what Eyles et al. (2020) found in England where extra teaching hours were added to compensate for the lost time during school closures. However, these findings contradict the

results of the study conducted by Ewing and Cooper (2021) in Australia which found that learners proceeded to learn uninterruptedly through distance learning mode regardless of the school closures.

The study findings denoted that the head teachers could use part of their responsibility allowances and sometimes part of their salaries to motivate teachers by providing them with lunch and transport allowances. This was done to enable teachers to work effectively during the extra teaching time after normal class hours to achieve the intended teaching and learning objectives. This is in line with Motivation and Social Cognitive theories which assert that high levels of motivation tend to boost teachers' perseverance, cognitive processes, and performance (Hattie et al., 2020; Schunk & DiBenedetto, 2020).

Furthermore, the findings from this study revealed that to manage the risks associated with learners' negative behavioral transformation manifested through truancy and the use of abusive language; some of the school disciplinary committees held some sensitization meetings with parents on how to mould the pupils' behaviors. This conforms to the findings obtained from the studies conducted in Zambia and South Africa which depict that teachers in collaboration with parents and guardians contribute to the proper behaviors of pupils (Fan & Williams, 2010; Mwase et al., 2020).

Additionally, the study findings denoted that having a well-established risk management plan in place is of paramount importance. This is based on the assertion that a risk management plan in schools is likely to enhance such learning institutions to properly identify risks and plan for their appropriate mitigation processes. This is in conjunction with the literature review which denotes that through schools' adherence to planning, identification, analysis, response, monitoring, and controlling of risks, risk management is embraced, which in turn guarantees safety in schools for proper teaching and learning to take place (Talet et al., 2014; Talet & Talet, 2014).

The schools under investigation managed to implement locally the mitigation measures against the emerged risks as follows: As far as the risks associated with academics are concerned, the head teachers demonstrated their leadership skills by mobilizing the teachers to collaborate and conduct extra classes after normal working hours to compensate for the lost time during school closures. They also motivated teachers by offering them with lunch and transport allowances in pursuit of the set objectives. Eventually, the schools organized parents' meetings for the rectification of pupils' misbehaviors like the use of abusive language, truancy, and dropout predispositions.

However, there were a few things that were overlooked during the management of the COVID-19 pandemic risks. If they were to be adequately attended to, they would have certainly minimized the likelihood of risks occurring, and even if the risks would occur, then they could still be dealt with accordingly thereby bringing about good results. One of the important things that were unforeseen in all the schools under study was the establishment of the risk management plan, a plan that is essentially composed of risk identification and risk mitigation. Therefore, if the risk management plan was to be there, then it would have enhanced the schools to identify the risks before they could occur and through risk mitigation,

planning and budgeting for risk alleviation would be enhanced. Hence, the presence of a risk management plan could have helped to prevent or minimize the effects resulting from the emerging discussed risks. This implies that through the risk management plan, the risks are also foreseen and planned for accordingly. Hence, the schools under inquiry could not have mitigated the emerged risks locally if there were to be a risk management plan in place as it could have guided them. For example, the head teachers could not have gone that far to use their salaries and allowances to motivate the teachers, instead, they could have used the funds as per the motivation scheme stipulated in the risk management plan.

Based on the research findings and discussions above, this paper makes some recommendations. For example, it is important that the Ministry of Education establishes a standard national risk management plan to cater for essential educational needs during emergencies so that risks are identified and their mitigations executed as per plan. Consideration of training of the teachers on how to deal with emergencies in the school context such that any emerging factors do not disrupt the teaching and learning processes is also important. Moreover, the Ministry of Education should consider the possibility of installing in schools the infrastructure that can support digital and technological teaching and learning processes so that the latter is not impaired during times of emergency. Teacher training in this area to enlighten and prepare schools for distance learning in case of such emergencies as the COVID-19 outbreak should accompany this. Curriculum developers should thus, plan for the curricula that accommodate emerging issues such that teaching and learning processes are not hampered by occurrences. The syllabi should be revised from time to time and made fluid such that any interruption should not jeopardize their completion.

5. Conclusion

The challenges that COVID-19 posed exacerbated the already existing challenges that schools and communities had. The situation was worse with the low-resourced communities such as where this study was conducted. However, the resilience with which the education system, communities, and schools maintained in laying measures to enable learning to continue is a fact to be recognized. They demonstrated the ability to see the need for change and adapt to it amidst pessimistic and unpredictable conditions. This calls for schools to be constantly prepared for changing teaching and learning environments. Finally, the pandemic was an awakening call for school curricula to include curricular on post-trauma for the more solid transition from crises.

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The data that support the findings of this study are available on request.

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The authors declare that there are no competing or potential conflicts of interest.

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