CENTRE FOR EDUCATIONAL RESEARCH AND TRAINING (CERTT)

IMPACT OF THE COVID-19 PANDEMIC ON STUDENTS IN PUBLIC JUNIOR SECONDARY SCHOOLS IN MALAWI

A report submitted to

The African-ASIA DIALOGUE ON EDUCATIONAL DEVELOPMENT (AAD)

by

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ACRONYMS

AAD	Africa-Asia University Dialogue for Educational Development
APHRC	African Population and Health Research Centre
CDC	Centre for Disease Control
CERT	Centre for Educational Research and Training
EIC	Equity in the Classroom
MoE	Ministry of Education
MoES	Ministry of Education and Sports
MoEST	Ministry of Education, Science and Technology
MOH	Ministry of Health
NSGE	National Strategy on Girls Education
NSO	National Statistical Office
PGE	Promoting Girls Education
PpCR	Pupil per Classroom Ratio
PREPARE	Partnership for Research on Progress and Resilience in Education
PTA	Parent Teacher Association
TV	Television
UBOS	Uganda Bureau of Statistics
UN	United Nations
UPE	Universal Primary Education

1.0 INTRODUCTION TO THE STUDY

1.1 Background Information

In response to COVID-19 pandemic several governments including the governments of Malawi, Zambia, Nigeria and Uganda (the countries involved in this study), ordered a closure of all schools and educational institutions. This was done to protect students. teachers and parents from the pandemic and support national efforts in the fight against the spread of the Coronavirus. The closure of the schools meant that over 91% of the world's student populations were affected (UN report, 2020). In Malawi, the Government of Malawi declared the COVID-19 pandemic a national disaster on 20th March 2020. Immediately, the Government ordered the closure of all schools and educational institutions on 23rd March 2020. Schools remained largely closed until September / October 2020 when they reopened in phases starting with classes that sit for National examinations and final year students at higher institutions of learning. Owing to the surging numbers of COVID-19 cases, schools and colleges closed again from mid-January 2021 until Mid-March 2021.

In most African countries, the pandemic caught the education sector off-guard as structures for remote learning were neither in existence nor fully developed. Nevertheless, ministries of education worldwide organized some distance learning measures for students to continue receiving their education at home. For instance, in Malawi, the government introduced radio programmes for primary school students, and online learning materials and non-digital learning sets for secondary schools (MoEST, 2020). However, there have been concerns that the remote learning measures most likely did not reach majority of students because many did not have access to enabling gadgets like radios and smartphones. According to the National Statistical Office (NSO), 2019 report, only 16% of Malawians have access to internet; 33% have access to radio; 52% have access to mobile phone; and 14% have access to a television. In addition, most students come from rural and poor backgrounds where opportunity costs of schooling are high making it unlikely that they would find space and time at home to attend home schooling[1]. And when schools reopened, there was pressure for teachers to cover the syllabus. With all this, loss of learning due to closure of schools due to the COVID-19 pandemic was inevitable in Malawi.

[1] The impact of COVID-19 on education in Malawi: Policy relevant research study report, Centre for Educational Research and Training.

Similarly, in response to the COVID-19 outbreak, the Zambian government came up with measures that would help learners to continue to learn. In this regard, government through the Ministry of General Education in collaboration with the Ministry of Information and Broadcasting announced the launch of an education platform on TV 4 branded Edu.tv and dubbed: Education beyond classroom experience. Unfortunately, at primary level, only grade 7 pupils had learning programmes included while the rest catered for grades 8 to 12 pupils (Hapompwe, Kukano & Siwale, 2020). However, there have been concerns that the remote learning measures most likely did not reach majority of students because many did not have access to enabling gadgets like radios and smartphones. This challenge was confirmed by Hapompwe et al (2020:647) who reported that in Zambia, for example, 'not all homes had TV sets or internet access for online materials.

In Nigeria, the first case of COVID-19 infection was confirmed in Lagos on the 27th February, 2020 by the Federal Ministry of Health. On 19th March, 2020, the Federal Government of Nigeria through the Federal Ministry of Education announced the closure of all schools at various levels. There is no doubt that the COVID-19 pandemic has presented more challenges to already fragile Nigerian education system, considering the negative impacts of the Boko haram insurgency, Fulani Herdsmen issue among others. In response to COVID-19 emerging issue in education, the Government at both federal and state levels and private sector implemented various learning interventions using digital platforms, internet-based tools and traditional media to mitigate the impact of schools' closure. Unfortunately, only few could access these opportunities since most of the students come from poor backgrounds and reside in the rural areas where access to regular supply of electricity and internet connectivity is a mirage.

In Uganda, education institutions were closed on 20 March 2020 as part of the measures to control the spread of the COVID- 19 pandemic. This move was a big blow to the government's efforts to promote gender parity and equality seen through the implementation of the Universal primary education (UPE) programme which was launched in 1997. The UPE programme resulting into increased access to education. In addition, successful campaigns and interventions followed this programme to keep girls in school such as: (i) Go-Back-to-School campaign launched by UNICEF in 2013; (ii) Promoting the National Strategy for Girl´s Education (NSGE) in 2000 (iii) Promoting Girl´s Education scheme (PGE); and (iv) the Equity in the Classroom (EIC) program. Measures to curb the disease have exacerbated existing inequalities, forcing especially girls out of school and placing them at heightened risk of violence in their homes and in the community.

To ensure continuity of learning, the government of Uganda through the Ministry of Education and Sports (MoES) came up with the Preparedness and Response Plan to COVID–19 pandemic. Standardized study lesson packages in the core subjects for primary and secondary level were developed and distributed to all students. In addition, model teachers prepared lessons to be air delivered on radio and TV stations across the country. There were also pre-recorded lessons to be accessed online. Nonetheless, not all students can access online learning. Further, the irregular availability of electricity and internet in the remote communities, limits students from accessing online study materials. In addition, since over 10 million people live below the poverty line (UBOS, 2018), very few families can afford a set of radio or Television thereby, preventing them from accessing radio and Television lesson. In the same way, the standardized study lesson packages in the core subjects for primary and secondary levels do not easily reach most homes.

In an attempt to prepare for safe re-opening of educational institutions in collaboration with the Ministry of Health (MOH) provided guidelines for re-opening and implementation of standard operating procedures for educational institutions during COVID-19. This was to provide guidance on measures to minimize the risk of the spread of COVID-19. Educational institutions re-opened starting October 2020 for candidate classes (P7, S4 and S6) and final year students at higher institutions of learning (MOES, 2020). Educational institutions were to resume full operations for all students when MOES and MOH determined that it was safe for all institutions to operate at full capacity.

The stated background, necessitated a need for in-depth studies to assess the impact that the COVID-19 pandemic has had on educational systems in various countries. Hence, the Africa-Asia University Dialogue for Educational Development (AAD) network facilitated the formation of research groups on COVID-19 to conduct some studies that would add some global literature on COVID-19 and Education. University of Malawi, University of Lagos (Nigeria), University of Zambia and University of Makerere (Uganda) formed one group and designed a research study to look into the Impact of COVID-19 on Junior Secondary School Education. This writeup is a study report for Malawi.

1.2 Objectives of the study

Broadly the study aimed to assess the extent to which COVID 19 has impacted on the education of students in Junior Secondary School in Malawi, Nigeria, Uganda and Zambia. Specifically, the study intended to:

1. Assess the enrolment levels of students before and after the school closure due to COVID19
2. Establish why some students dropped out of school during the COVID 19
3. Identify the challenges faced by students in the teaching and learning process during the closure of the schools and after schools reopened
4. Assess compliance of the schools to COVID19 prevention measures for the safety of students

As earlier stated, this report presents and discusses the findings of the study in Malawi.

2.0 STUDY METHODOLOGY

2.1 Overall Design of the Study

The study used a mixed method research design where both quantitative and qualitative data were collected. A mixed method research design uses both quantitative and qualitative methods of data collection concurrently in order to best understand the phenomenon of interest (Creswell et.al, 2003 captured in Maree, 2007). The qualitative data were used to triangulate the quantitative data while in some cases it was vice versa. The data supplemented each other during the data analysis and interpretation process to give a comprehensive story about the extent to which COVID 19 has impacted on junior secondary education in Malawi.

To get the necessary information, the study administered a school level administrative data collection questionnaire (School checklist) to head teachers of selected schools, a semi-structured questionnaire to teachers and students, did COVID-19 compliance assessment and conducted some key informant interviews with Head teachers. Document analysis was also done to supplement the primary data.

2.2 Sample and sampling procedure

To achieve the stated research objectives in this study, the study involved the participation of about 360 estimated key education stakeholders in the Junior Secondary Schools in Malawi, broken down into the following three respondents' categories:

i. Teachers
ii. Students
iii. School Administrators (Head teachers)

Our sample of schools comprised 10 Junior Secondary Schools in Malawi. These are public co-education (mixed) secondary schools with a mix of rural and urban settings. In total 8 schools were rural schools while 2 schools were urban schools and this is in relation to number of rural and urban schools in the selected study district in Malawi. Noteworthy is the fact that the study was conducted in Zomba District where the researchers are based. Hence the district was chosen for convenience purposes. In each school we administered a school checklist to the school administrator or his / her deputy. We also did a stratified random sampling of teachers to select at least 5 teachers' representative of gender and class / form to respond to the teacher questionnaire. Similarly using stratified random sampling, we sampled at least 30 students in each of the classes / forms of the Junior Secondary School to respond to the student questionnaire. Hence our sample comprised 10 school administrators; 50 teachers and 300 students.

2.3 Data collection methods and instruments

Different data collection methods and instruments as highlighted earlier were used in this study so as to ensure reliability and validity of the data collected. The data gathered through the various instruments triangulated each other to give a clear picture of how COVID -19 has impacted on the education of students in the in Malawi.

2.3.1 School level administrative data collection questionnaire / School Checklist

This school level data questionnaire was used to capture information about the school background in terms of administrative data such as learner enrollment, learner dropout, teacher numbers and school infrastructure. The checklist was administered to the head teacher or deputy head teacher of the school depending on who was available at the time of the data collection. A physical observation of the school infrastructure was done to supplement the information provided in the school checklist. Noteworthy is the fact that data prior to school closure and after school reopening were gathered through this instrument.

2.3.2 Student questionnaires

A structured questionnaire was designed specifically for this study and was administered to students. The questionnaire solicited both quantitative and qualitative data on how the schools have been impacted by the Covid-19 pandemic and how they have responded to the same. Their perceptions on Covid-19 preventive measures and guidelines were also sought through the questionnaire.

2.3.3 Teacher questionnaire

A semi-structured questionnaire was administered to the 5 selected teachers at each school to get their perceptions of the impact of COVID-19 on secondary education. The questionnaire mainly collected qualitative data and solicited their views on enrolment of students after schools reopened, reasons for dropout during the school closure, challenges the schools and especially the students are facing in the teaching and learning process as a result of the COVID 19, and the compliance of the schools to the laid down COVID 19 guidelines.

2.3.4 Document analysis

In document analysis as a data gathering instrument, the researcher focuses on all types of written communications that may shed light on the phenomenon that the researcher is investigating. For this study, literature on education and COVID-19 and reports from the various clusters and any other relevant secondary data sources were used to supplement the primary data that were collected through the other data collection methods and instruments.

2.4 Data Analysis

The quantitative data collected through the checklist and the student questionnaire were entered under SPSS. We then applied a few analytical techniques to sum up the indicators. The analysis took the form of univariate analysis such as frequency counts and percentages. Tables and figures have been used to present the findings and where possible, data has been disaggregated by gender for some variables. The qualitative data was reduced by clustering common themes and then tallying and ranking the responses to uncover the main issues that were arising. The issues were then triangulated with the quantitative data and put together as findings of the study.

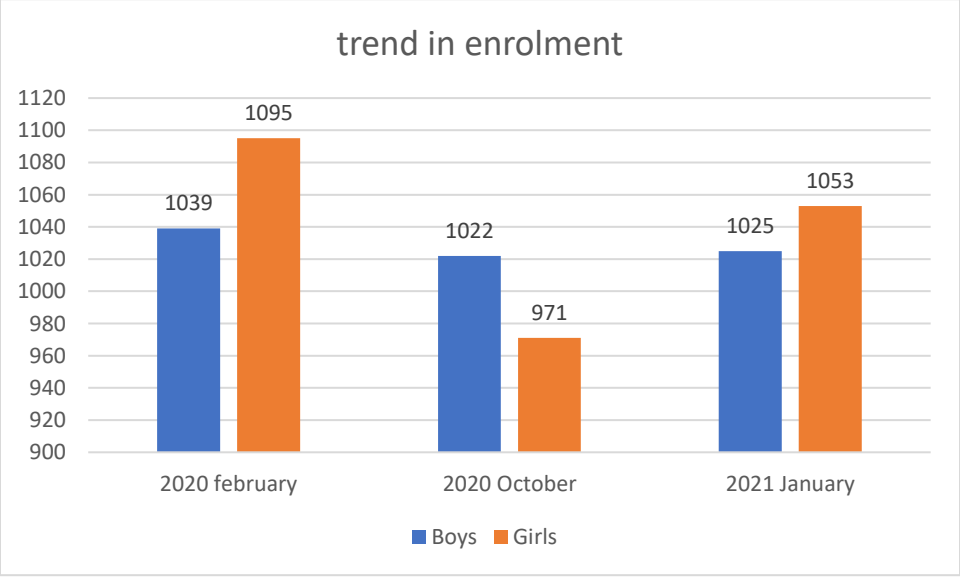
3.0 FINDINGS

This section presents and discusses the findings of the study on the impact of COVID-19 on junior secondary education in Malawi. Focus is made on trends in enrolment and dropout prior, during and after the peak of COVID-19 in Malawi. The section further establishes reasons why some students dropped out of school during the COVID-19 era; highlight challenges that were faced in the teaching and learning process during the closure of the schools and after schools reopened; and Assess compliance of the schools to COVID19 prevention measures for the safety of students and teachers.

3.1 Student enrolment

Data were collected on enrolment figures of students before the schools closed in March 2020 due to a surge of COVID-19 cases and after the schools reopened in September / October 2020 and January 2021. Figure 1 shows the trend in enrolment of form 1 and 2 boys and girls.

Figure 1: trend of enrolment for form 1 & 2 girls



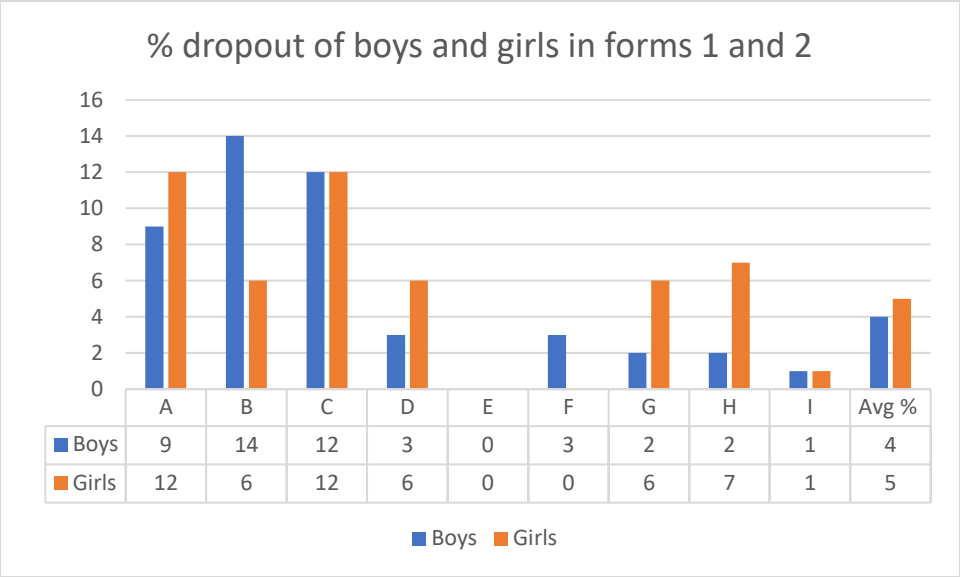
As illustrated in table one, the long school closures as a result of COVID-19 affected enrolment of students in Malawian secondary schools as evidenced from the enrolment figures for February 2020 (before schools closed) and October 2020 (immediately after schools reopened). The drop was more noticeable for girls than boys as enrolment of girls dropped by 11.3% while that of boys was 2.7%. This is an indication that girls were affected more by COVID-19 than boys. Although, enrolment tried to pick up in January 2021 as seen from Figure 1, the enrolment levels were still below the pre-COVID figures. Literature has further shown that even in 2022, enrolment figures for primary school students were still below the pre-COVID -19 figures (CERT-PREPARE study, 2022) and the trend might not be very different for secondary schools.

The Government of Malawi through the Ministry of Education put in place some ways to ensure that students returned to school when the schools reopened. Such measures included community sensitizations; use of mother groups to talk to the students in the communities; use of Parent Teacher Association (PTA) meetings to encourage parents to ensure their children go to school; and chiefs by laws where the chiefs would punish those that did not send their children to school. However, from the figures of the students that did not enroll when schools reopened, it could be that the measures were not effective enough.

3.2 Student dropout

Of interest in this study also was to check whether the long school closure due to COVID-19 had some impact on student dropout. Raw dropout figures were therefore collected in the sample schools for the period of September /October 2020 when the schools reopened after the long school closure and converted into percentage dropout for each sample school. Figure 2 illustrates the percentage dropout for forms 1 and 2 boys and girls.

Figure 2: Percentage student dropout



	A	B	C	D	E	F	G	H	I	Avg %
Boys	9	14	12	3	0	3	2	2	1	4
Girls	12	6	12	6	0	0	6	7	1	5

From figure 2, dropout for girls was greater than that of boys averaging 5% for girls and 4% for boys. This was the case for almost all the sampled schools except in two schools where dropout of boys topped that of girls. Two schools registered the lowest rates of 0% and 1% respectively, interestingly both schools were urban schools. This gives an indication that COVID 19 might have affected rural and urban schools differently with rural schools registering more dropouts than urban schools.

Qualitative data gathered from teachers in the sampled schools alludes to the fact that long closure of the schools due to COVID-19 contributed to some extent, to dropout of students especially the girls. One teacher in one of the schools that were visited lamented that:

> *A good number of female students fell pregnant and they dropped out of school due to the long break as a result of Covid-19. Others dropped out because they were afraid of getting infected when they return to school since the pandemic had a lot of misconceptions.*

Another teacher at another school said that:

> *Drop out of students was on the increase at the school because learners had nothing to do at their respective homes, as a result they were indulging themselves in bad practices that hindered their*

education. For example, at my school about 30 students dropped out of school.

Other reasons that exacerbated the problem of dropout due to COVID-19 as mentioned by teachers through the semi structured questionnaire that was administered included the following:

- Hearsays that the government will force Covid-19 vaccinations to students in schools. There were a lot of myths surrounding COVID-19 vaccinations such that many people opted not to get vaccinated. So, rumors of forced vaccinations in schools were reason enough for some students not to return to school after schools reopened.
- Some students got married due to the long school break amidst uncertainties of school reopening.
- Some students are generally not interested in school and the long school closure just gave them an excuse to drop out
- The financial crisis as a result of loss of jobs due to COVID-19 also lead to school dropout as some parents failed to pay for their children's tuition.

The findings on increased dropout and declining enrolment due to COVID-19 are consistent with other studies conducted by the Centre for Educational Research and Training (CERT – PREPARE study, 2021; and CERT- APHRC study, 2022).

3.3 compliance of the schools to covid19 prevention measures for the safety of learners

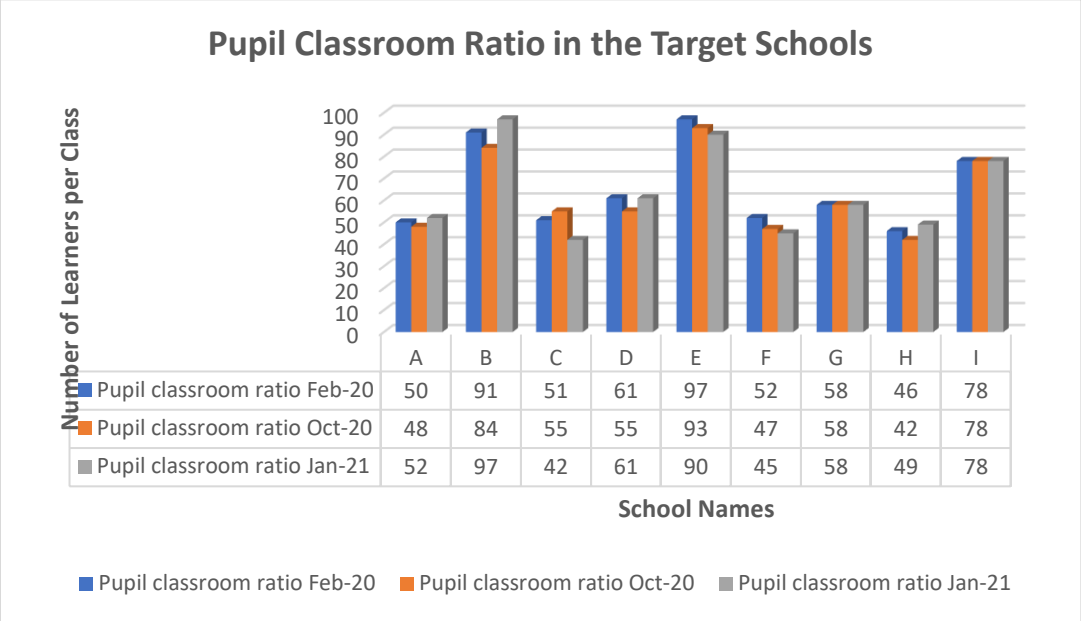
As indicated in the research questions, the study also assessed the compliance of schools to Covid-19 prevention measures for the safety of everyone in the secondary schools. During the assessment, the study administered questionnaires to the junior secondary school students in the 10 sampled schools in Zomba district. The assessment focused on issues to do with class size, physical distancing, monitoring body temperature, disinfection of school buildings, use of hand sanitizers by both teachers and students, hand washing, etc. The study further sought the challenges associated with the schools' adherence to these measures.

3.3.1 Class size and physical distancing

Class size and physical distancing were some of the measures that were put forward by the Ministry of Education in Malawi to limit the spread of Covid-19.

According to the Education Sector Plan Implementation Plan (ESIP II), the recommended number of secondary school students in one classroom is 40 and this was also emphasized in the Covid-19 measures to ensure social distancing of 1m to reduce Covid-19 spread. In this study, both students and teachers were asked questions in this regard to check their compliance to these measures. The results showed that in terms of class size, none of the schools had complied to the recommended class size as indicated in the table below:

Figure 3: Pupil Classroom Ratio in the target schools



According to the figure above, all the schools had a pupil classroom ratio. The minimum ratio was above 40 with the minimum at 46, 42, and 42 in February 2020, October 2020 and January 2021 respectively while the maximum was at 97, 93 and 97 for the same periods respectively. On average, the classroom pupil ratio was 65 in February, 2020, 63 in October, 2020 and 63 in 2021. With these class sizes, it is evident that the schools' lack of compliance to the recommended measures created challenges in keeping social distances in classrooms because there were more learners than the recommended number. Results from qualitative data also confirm that it was challenging to keep social distance in classrooms due to inadequate infrastructure and high enrolments. This led to congested classrooms. However, schools were also encouraged to decongest the classes by splitting the classes into streams but this was also difficult to implement due to inadequate teachers.

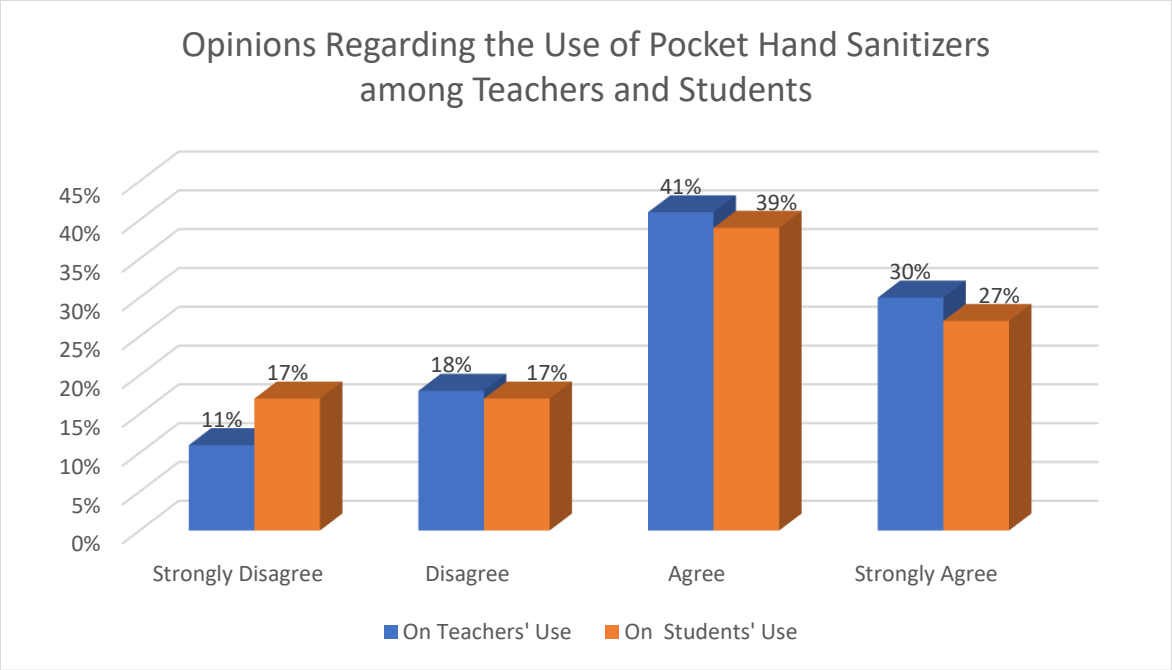
3.3.2 Handwashing and sanitization

One of the strategies to minimize the spread of Covid-19 was to wash hands with soap and or sanitize them with alcohol-based sanitizers. Specifically, the guidelines for school reopening stipulated that teachers needed to regularly wash their hands, before and after lessons and before handling papers/student books. In addition, hand washing facilities were expected to be available at the entrance to school; by toilets; entrance to classrooms, library, administration offices etc. The study also explored how schools complied to these hygiene practices by administering questionnaires to students in 10 selected Community Day Secondary schools, interviewing teachers and head teachers. The study found that 5 out of 9 schools that provided information had piped water for handwashing representing 56% of the schools, 3 schools (33%) had boreholes while 1 school (11%) was using a community borehole for handwashing.

The study also investigated the existence of hand washing points around the school, which had water and soap for washing hands and it was found that 6% of the learners indicated that there were no hand washing points while 94% indicated that they had hand washing points. When students were asked on whether their teachers washed their hands before entering classrooms to teach, the results showed that not all the teachers were washing hands before entering classrooms. For example, 69% indicated that teachers were washing their hands while 31% were not. This indicates that some teachers were not complying to the measures that were put forward by the Ministry of Education. This is not surprising given that there were no hand washing points in some schools. Informal observations in the schools showed that hand washing points were available but not in all critical areas. For example, not every entry to a classroom had a sanitization point. Within a school, there could only be a few hand washing points with buckets of water with soap and sometimes without soap.

The study further explored the use of pocket hand sanitizers among teachers and students by asking opinions from the students and the results are shown below:

Figure 4: Students' Opinions on the use of pocket hand sanitizers



The results in the graph above shows that only 30% of the students strongly agreed that teachers use pocket hand sanitizers and 27% of the students strongly agreed that students use pocket hand sanitizers. This is an indication that pocket hand sanitizers were not used by many. A follow-up with both the teachers and students on why some were not following hygiene practices such as hand washing and sanitization revealed some challenges as follows;

- Inadequate funds to buy Covid-19 preventive resources such as hand sanitizers, adequate buckets and soap for hand washing to cater for both teachers and learners. When the government supplied buckets, soap and sanitizers, they were still not enough for all. Most of the students come from poor families and could not afford to buy hand sanitizers, which were expensive.
- Unwillingness of students to observe Covid-19 measures and use of PPEs especially on the part of handwashing. However, one school under a certain project was lucky as it was provided with masks, soap and hand sanitizers. It was also reported that some students could not use hand sanitizers in presence of others for fear of being labelled boastful.

3.3.3 Use of face masks

According to the Centre for Disease Control (CDC, 2021) cited in Chiwaula etal (2021), masks were recommended as a simple barrier to help prevent respiratory droplets from travelling into the air and onto other people when the person wearing the mask coughs, sneezes, talks, or raises their voice. It was therefore expected that both teachers and students would be using masks during the

period of Covid-19. When students were asked on whether teachers used face masks during teaching. The study found that 39% of the students strongly agreed that the teachers wore face masks when teaching, 40% agreed while 12% and 10% disagreed and strongly disagreed respectively. This clearly indicates that some teachers were not compliant to the wearing of face masks. Interviews with teachers found that both teachers and students found the wearing of face masks very challenging because teachers found it difficult to teach while wearing masks as it affected their breathing. Students were also not used to wearing masks as well.

According to teacher interviews, wearing of masks reduced the audibility of the teacher as their voice could not be heard clearly at the back of the classroom. Face masks disrupted communication between teachers and students because they couldn't grasp what the teachers were saying. The study also found that the masks were not readily available due to inadequate funds to buy Covid 19 materials (PPEs)and were also expensive when available and most students could not afford to buy masks for everyday use because most of them are poor. Some students opted to absent themselves from school for fear of contracting Covid-19 because they could not afford face masks. In cases, where masks were provided by government or through some projects, they were not enough to cater for all learners. Lack of PPEs was therefore a great challenge to both teachers and students in observing COVID-19 protection measures. On the other hand, there was some resistance to break the status code of people's daily routines and behaviors among both teachers and students.

3.3.4 Monitoring body temperature

The study assessed whether the schools had thermo scanners/ thermometer/temperature gun for monitoring body temperature to detect Covid-19 symptoms early. The results showed that only five (5) of the 9 schools that provided data for this had the temperature gun representing 56% while four (4) did not have because they lacked financial resources to procure the gadget. This might be an indication that some schools may not have had such gadgets during the period to monitor body temperatures for early detection of Covid-19 symptoms. The results also showed that, although five schools had the thermometer, majority of the schools (4 out of the five) had only one thermometer while one school had at least three of them against their enrollment in the schools as indicated earlier. However, the study did not make observations on whether the available thermometers were being used in the school.

3.3.5 Disinfection in the schools

One of the guidelines provided by the government to prevent COVID-19 and ensure quality learning during the Covid19 period was that the Ministry of Education and Ministry of Health, through the District Health Officers and District Environmental Health Officer should ensure periodic disinfections at schools although they did not specify on how regular this should be done. This was therefore assessed to see how compliant the schools were by looking at how many times the disinfection occurred in the schools since Covid-19 started in march 2020. Results from the study showed that there was a total of 31 disinfection activities done in the schools visited. The number of disinfections done ranged from 2 to 6 times per school within a period of two years between the onset of Covid- 19 and the data collection period. On average each school had disinfected the school only three times, which may not have been enough although the guidelines from the Ministry of Education only emphasized on periodic disinfection and did not specify on the number of times per month or term.

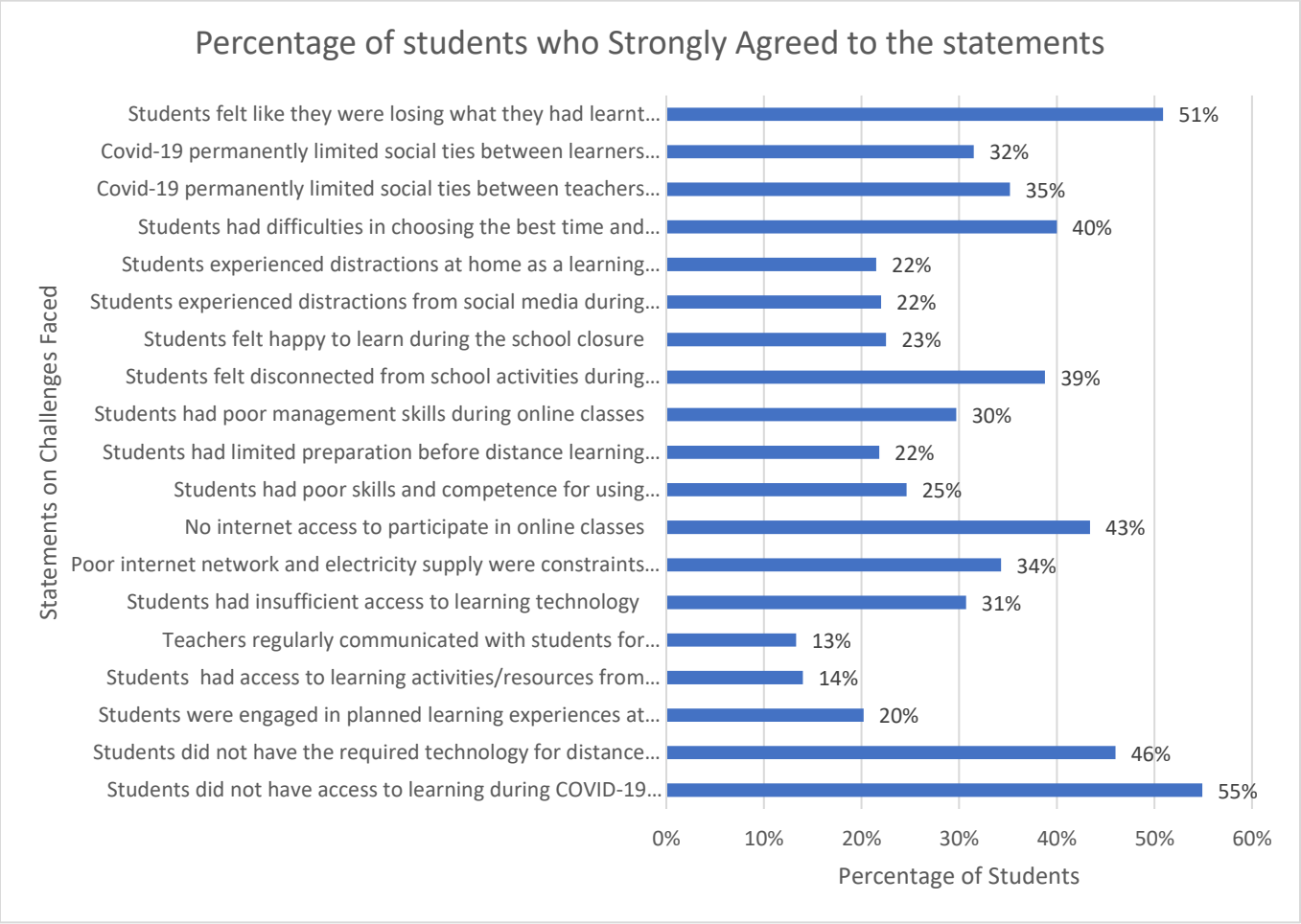
3.5 Challenges faced by learners in the teaching and learning process during the closure of the schools and after schools reopened

One of the objectives for this study was to identify challenges faced by learners in the teaching and learning process during the closure of the schools and after the schools reopened. Results from the qualitative data showed that the general challenges faced by the teachers and students during the school closures and after schools reopened were as follows;

- It disturbed the school calendar as examinations had to be postponed and this affected the school cycle for students. The students were also affected psychologically.
- School closures were putting pressure on teachers and learners after the opening of the school. This is because there was a lot of work to cover within a short period of time hence leading to low coverage of syllabus in all subjects.
- Teachers complained of poor performance among learners in the examination classes e.g. during JCE Even in other classes not meant for national examinations, learner concentration in class was affected.
- School closures psychologically disturbed school activities and welfare of both teachers and students. During reopening both teachers and students were still living in fear of contracting the disease.
- The splitting of classes after schools reopened had created more load on teachers and this led to a situation, where learners were not learning fully since teachers were few and they easily got tired due to a greater number of periods allocated to them per day. It was a lot of work for teachers to handle a number of classes per day.

The students' data on the challenges faced was obtained from the questionnaires administered to them. Students were asked to give their position on a number of statements and the results showed that they strongly agreed on the statements as indicated in the table below;

Figure 5: Challenges faced by students during Covid-19



Results indicated in the figure above, indicates that students agreed to the statements regarding the challenges faced both at home and school during the covid-19 period. The results show that slightly above half of the students (55%) in the target secondary schools, did not have access to learning during Covid-19 school closures. This is due to the fact that some students had no internet access to access online materials (43%), students did not have the required technology for distance learning (46%) etc. Similarly, about half of the students (51%) felt that they were losing what they had learnt. This confirms the qualitative data, where it was reported that the performance of learners had gone down.

Other challenges were associated with the strategies that schools were encouraged by the Ministry of Education in Malawi to help students while they were at home and also when they came back. For instance, schools were encouraged to engage students through remote learning during school closures and remedial teaching when schools opened.

3.5.1 Remote learning

This was one of the distance learning strategies commended by the government for schools during the Covid-19 to mitigate the loss of learning during the school closures. The government itself provided online learning contents for both primary and secondary school through the Ministry of Education website, where students could access them. Some of the teaching sessions were put on radios for students.

Interviews with teachers and students revealed most schools did not provide remote learning services themselves due to lack of capacity and resources for technology-based teaching. Teachers actually complained that there was no training on how to carry out remote learning strategies and they had no idea on how to go about it. This confirms the findings from the students where slightly over half of the students reported that they had no access to learning during the Covid-19 school closures. However, students were encouraged to use the website of the Ministry of Education which had notes on it and also to listen to the radio for education programs. In fewer cases, some schools gave learners an opportunity to borrow school books to study at home when the schools were closed. In some schools, students were given printed notes so as to keep them busy at home, in others, teachers formulated questions and assignments and gave to students to work in their homes and students were submitting their work to the teachers for marking etc.

However, the study noted the following challenges among the students associated with remote learning from the qualitative data. Firstly, where students were given some work/assignments by teachers, they lack supervision from the teachers. In addition, only students who lived near the school could access the questions and assignments as some hailed from faraway places. Some teachers complained that students were not able to get answers immediately when they encountered questions from the website notes on internet and those given by teachers in fewer cases. Teachers reported that in Most cases, students failed to access remote learning from the ministry of education website due to poor internet connection, some did not have the gadgets. This similar to what students said earlier. Generally, many parents in the rural schools cannot afford a radio or a computer and even a smart phone for their children to access radio lessons and e-learning respectively.

3.5.2 Remedial Learning

The Ministry of Education in Malawi also identified remedial learning as one of the guiding educational principles for school reopening after closures. They advised

schools to maximize instructional time (by extending timetables to accommodate daily remedial instruction periods) for learners and adjust to timetables to accommodate remedial instruction before and after classes (MoE, 2020 cited in Chiwaula, eta, 2020). All teachers were expected to be oriented in remedial learning. This study therefore explored how this was done in the target schools and found that teachers conduct remedial lessons before and after school hours, where learners are allowed to stay at school for two hours after normal learning hours or come early before classes start. Teachers in some schools reported that they conduct remedial classes during weekends and casual holidays to make up for the time lost during school closures and to help students falling behind after particular lessons. Others involve students in study circles. However, the qualitative results showed that there were challenges associated with remedial learning as follows;

- Inadequate time to conduct remedial lessons since most of the teachers scrambled to use the same limited time for it.
- Most learners are not willing to attend remedial lessons especially during weekends. Some parents do not allow their children to go to school during weekends. Therefore, not all students attend the make-up classes since it is done outside the time table.
- Students attention and attendance is affected since this occurs outside school hours, when they are tired especially those done after classes in the afternoon. Teachers get tired as well.
- Some teachers demand money from students to conduct make up classes especially during weekends and this also discourages their attendance.
- Inadequate teaching and learning resources.
- Long distance to school discourages attendance of learners for remedial lessons as they fail to make it to school before classes start e.g. by 6 am.
- Lack of motivation among teachers to monitor study circles.

4.0 CONCLUSION AND RECCOMMENDATIONS

4.1 Conclusion

From the data that has been presented and discussed in this study, it is an incontrovertible fact that COVID-19 impacted negatively on junior secondary school education in Malawi. Enrolment of learners declined to such an extent that even in the year after the pandemic, student enrolment figures were still below the pre-COVID figures. Similarly, student dropout increased during the period of the pandemic. Further, COVID-19 appear to have exacerbated the vulnerability of girls as reflected in more girls dropping out of school due to teenage pregnancies and marriages owing to the prolonged closure of schools.

The study also notes that there were a number of challenges faced by both teachers and learners during the school closures and after the schools re-opened. General challenges included the disruption of the school calendar and postponement of examinations, poor performance of learners, too much work to be covered by teachers within a short period after re-opening. Other challenges were related to remedial learning strategies and remote learning strategies. For instance, the recommended remote learning was not done in many schools and where it was done, it was not successful because students were doing the tasks without the teachers' supervision. In addition, very few learners benefited while the majority were left behind due to lack of resources, e.g. they had no radios, suitable phones, computers, e-readers and so forth. Many parents could not afford a radio or a computer even a smart phone for their children to access radio lessons and e-learning respectively.

The study further established that the schools, teachers and students were not fully compliant to Covid-19 preventative measures as put forward by the authorities due to several challenges. For instance, schools had difficulties in following these measures due to inadequate infrastructure, limited resources i.e. both material and financial resources to cater for both teachers and students. Since this was also a new way of doing things, there was general forgetfulness and reluctance to follow the measures among both teachers and students. However, later people got used to the new way of living during the pandemic and conformed to the norm and in the long run, the government, other stakeholders provided the needful materials although they were still not enough.

4.2 Recommendations

Based on the findings of this study, the following recommendations are being put forth:

- Strategies to ensure that emergencies and disasters such as COVID-19, do not exert pressure and disruptions in learning, need to be explored and implemented. Due to lack of structures to keep students busy when schools were closed due to COVID-19, some students ended up finding solace in marriages and engaging in immoral behaviors that prevented them from returning to school when the schools reopened.
- The COVID-19 pandemic exposed glaring deficiencies of the Malawi education system in ensuring that students continue learning while schools are closed. Secondary schools should be well resourced in terms of technology-based resources for online teaching in times of emergencies to avoid lost learning during emergencies.
- Involvement of communities in the education of their children is vital in times of emergencies. Sensitizations on how parents and communities can play their role to support the education of their children should be given much attention. Bye -laws on how to protect and safeguard vulnerable children who can easily dropout of school because of emergencies should be enforced.
- Schools need to be provided with adequate infrastructure i.e. classrooms to meet the recommended pupil classroom ratio of 40:1 for quality teaching and learning and to help in times of pandemics like Covid-19.
- There is need for general sensitization of the school communities whenever something new is happening.
- There is need to recruit more teachers to cater for the large number of students. They should be trained on remote learning strategies including online teaching so as to be able to sustain teaching during emergencies when schools are closed.
- Schools should be provided with adequate financial resources for procurement of materials in times of health emergencies like Covid-19 and the recent cholera outbreak in Malawi.

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