EVALUATION OF STAKEHOLDERS PREPAREDNESS AND SECONDARY EDUCATION IN NAKURU COUNTY-KENYA AMIDST OF COVID-19 PANDEMIC

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ABSTRACT
The purpose of this study was to establish whether stakeholders of secondary school education were prepared in combating COVID19 effects among students and staff in Nakuru County. The study came up with six objectives whereby the overall objective was to assess stakeholders' preparedness for schools' reopening. The findings and recommendations of the study are deemed significant since they are expected to inform policy makers on how to control contagious future pandemics in schools. Out of 345 targeted schools, 132 were selected through Stratified Random Sampling which was considered suitable because the targeted population was heterogeneous in nature as it comprised of various categories of schools. Full responsibility for developing recommendations which would assist policy makers to come up with practical guidelines solely lies on the Education System, Ministry of Health, Local Community and the whole country. The study was done in 2020 and it adopted descriptive research design in which quantitative and qualitative data was collected using questionnaires. The researcher analyzed data using tables and bar graphs. The study found out that 239 stakeholders forming 90.53% of schools were ill-equipped to handle effectively the disease's effects and recommended that, the government be in the forefront in creating awareness of its effects amongst learners, staff and community.

Key Words; COVID19 pandemic, Cross-infections, Disaster Management, Disaster Risks, Heterogeneous,Institutional Preparedness, Management Systems, Strategic Interventions.

I. INTRODUCTION

The world over, 93.82% transmission of communicable diseases such as influenza, meningitis, colds, measles, Hepatitis B&C and Herpes Simplex, among secondary school students has frequently been witnessed by over 86 countries and is therefore seen to be probably inevitable. Although many such cross-infections seem to be short-lived and in essence not very serious, these diseases are in many occasion concentric and with cyclical consequences on students, teaching staff, parents, educational achievements and the entire community as a whole. Measures that are meant to combat the effects of viral diseases are, thus very significant, as far as students' health, that of teachers', parents, not forgetting all other adults found in a school set up, are concerned. Thompson et, al [1] observes that, pandemic planning's ethically known frameworks indicate that there exists a considerable number of variations in schools when they try to pay attention to following ethical processes and known values. There is variation in regard to how school administrations disseminate information to members of staff and students in general either openly and transparently, the level at which members of the community surrounding the schools consider themselves as important participants in the managements' decision-making, and the manner in which those who make decisions respond to the many different situations.

According to UNESCO, UNICEF AND World Bank Report [2], by 2020-04-12, 1.400 billion students in both Primary and Secondary schools globally had been affected due to school closures as governments globally tried to respond to the COVID19 effects. UNICEF's Monitoring Report of April 28Th 2020 indicates that more than 177 countries in the world closed down schools therefore affecting 73.5% of learners' population globally. Most International Examining bodies like Cambridge International Examinations (CIE) released a statement on 23rd March 2020, announcing their cancellation of Cambridge IGCSE examinations worldwide, Cambridge O Level Exams, Cambridge International AS & A Level Exams, Cambridge AICE Diploma Exams, and Cambridge Pre-U examinations which were to be undertaken in the months of May and June 2020 in all countries. Lee J., [3] International Baccalaureate reported that it had to cancel all its exams that were to be done in all countries across the world.

According to Research done by *UNESCO*[2], not only does closing of schools affect students, teaching and non-teaching staff and their family members in their society but also it brings about consequences that are economic and societal in nature. In the absence of enough knowledge and information base, the Ministries of Education across governments worldwide, cannot establish, develop and implement well-thought-out and elaborate strategic interventions to the infectious epidemic that may bring about real differences in schools and other educational institutions. Natural calamities, such as COVID19 pandemic, are indicators under which planning in education sector is done both by the Ministry of Education and also by secondary schools. Closure of schools as a way of responding to the virus infections have shed light on several related issues that impact negatively on access to education, as well as wider socio-economic and societal issues.

By March 14Th 2020, more than five million (5000,000) secondary school students in the country were not learning in their schools because of the nationwide closure of all educational Institutions occasioned by the presidential directive issued in a bid to control the spread of Corona Virus disease. According to the Ministry of Health Experts, most individuals who are infected with corona virus are known to be having a medically known period of time within which they can infect those interacting closely with them and also a period within which they are considered to have fully recovered and cannot therefore infect others with COVID19.

It is worthwhile to note that, when schools are temporarily closed in order to contain a pandemic, the closers brings forth very high economic and social cost implications to the ministry, parents and society in general. The disruptions that are brought about by such closers affect many people in societies. The impact that come as a result of the closers is experienced more severely by those students who are physically challenged and their families which in most cases include interrupted learning, and compromised nutrition. Besides, it also brings about problems related to childcare and also consequent economic costs to those families that are not working. As observed by Organization for Economic Cooperation and Development-OECD [4] studies, performance of a school critically hinges on its management system which must ensure that there is maintenance of close relationships between the learners themselves and their teachers. This is especially true with students who are coming from economically low backgrounds and who may not be having support from parents thus forcing them to learn on their own. Parents who are working may also be forced to forgo their work when schools close so as to take care of their children, a scenario which makes them incur wage losses and by extension impacting negatively on productivity as a whole as observed by Johnmax et al [5].

Closing of schools which do not meet the required health standards in most cases make parents and Ministry of Education officials transfer students to neighboring schools that have satisfied conditions set by the ministries of health and Education.

According to Harley et al [6] outbreaks that are brought about by serious infections which are brought about by infectious viruses, bacteria and parasites, have in the past been evidentially documented among learners and staff in the affected schools. Brennan et al [7] supports this view by observing that most respiratory and gastrointestinal illnesses brings about absenteeism on the part of both students and staff in schools. They nonetheless have an impact on respiratory infections acquired in schools. Rhinovirus infections for example, play a major role in attracting and bringing about asthma which results in the affected person being hospitalized. As noted by Collins et al [8], such illnesses result in increased health care costs, loss of public funding for schools, added administrative expenses, and continuous absenteeism at work stations on the part of staff and parents who may be working.

It is important to note that, infections can be passed on from one person to another by droplets or large particles that are released from a coughing person, sneezing, or wheezing, or by vomits or self-inoculation that comes about because of touching contaminated surfaces as observed by Collins et al [8]. Differentiating between various transmission ways can be extremely difficult because the role played by airborne transmission has yet not been completely understood by health experts. However, it has now been understood that there are many contributing factors which enable passing on infections from one person to another which include the number of learners concentrated in one place in school, their years of age, the level and rate of crowding in classrooms, teacher-to-learner ratios, their geographical location, among others.

As observed by Kekić et al [9], the responsibility of ensuring that there is safety and security in schools lies with the school Principals and Boards of Managements, the community, and the entire education system. The school principals need to show leadership by coordinating all stakeholders and all the sectors concerned in ensuring that every person participates in bringing about safety and security in schools. The established committee then develops, implements, adapts, and updates the school disaster management plan. The committee typically meets at the start of each year, or quarterly in any given financial year. Its duties and roles include; ensuring increased personal and institutional awareness and preparedness, coming up with mitigation measures and suggestions on how to apply them, taking the lead in conducting one simulation drill every year, evaluating the results obtained at the same time adjusting the plan accordingly. In some situations, the committee should be given power to make and maintain other linkages between members of the Management Boards of their schools and other existing disaster management authorities within or outside the county.

Management of school disasters in essence, as noted by Berkman, B.E.[10], is therefore an internal assessment carried out by the members of the school Management Board through the principal and planning of the actual physical protection and response capacity development which is initiated for the sole purpose of protecting learners and staff from any physical harm. It also ensures school disruptions are minimized by ensuring there is continuity in learning by all learners. Besides, the committee Develops and maintains safety and security culture in schools as well as ensuring that there is implementation of School Disaster Management Plan. A country's impact assessment has in the past heavily relied on demographic models in order to make projections of student and pupil enrolments in schools and teacher requirements.

While a number of more qualitative factors may be identified which are most likely to impact on the preparedness of school management systems in handling highly contagious diseases such as COVID-19 pandemic, there is no empirically analyzed data that can serve as adequate supporting evidence to prove this. It is based on this understanding therefore that this study set out to fill this existing gap by establishing the level of preparedness by secondary school stakeholders in combating COVID-19 pandemic in their schools.

II. RESEARCH OBJECTIVES

The study set to achieve the objectives given below;

1) Examine the extent to which stakeholders effected school closure's directive as a strategy to combat COVID-19 Pandemic's effects on learners.

2) Assess the Role of School Boards of Management in combating the spread of COVID-19 Pandemic's effects in schools;

3) Establish the Role played by Disaster Management Committees in combating COVID-19 pandemic effects in schools;

4) Establish the extent to which officials of the Ministry of Education and that of Health have created awareness amongst stakeholders of schools on effects of COVID-19 Pandemic.

5) Assess the extent to which local leaders and other stakeholders of secondary schools have helped in preparation for reopening of their schools and also in combating the spread of COVID-19 Pandemic's effects;

6) Examine the Role of Traditions and Beliefs in determining school community responses to COVID-19 Pandemic's effects in schools.

III. RESEARCH QUESTIONS

The study sought to answer the following research questions;

1) To what extent have stakeholders effected school closers' directive as a strategy to combat COVID-19 Pandemic's effects on learners?

2) What Roles have school Boards of Management played in Combating COVID-19 Pandemic's effects in Schools?

3) What Roles have schools' Disaster Management Committees played in combating COVID-19 Pandemic's effects in schools?

4) To what extent have officials of the Ministries of Education and Health sensitized school stakeholders and the public on the effects of COVID-19 Pandemic?

5) To what extent have local leaders and other stakeholders helped in preparing for reopening of schools and also in combating the spread of COVID-19 pandemic's effects?

6) What Role are Traditions and Beliefs playing in determining school community's response to COVID-19 Pandemic's effects in Schools?

IV. METHODOLOGY

Research Design;

This study applied Ex-Post Facto design which according to Kerlinger,[11] is a system of carrying out empirical inquiries in which the researcher has no direct control over the independent variables mainly because the variables' manifestations have already occurred therefore making it not possible for them to be inherently manipulated. The design allows Inferences to be made on the variables' relationships without any direct interference from the variable under investigations. Kerlinger, [11] goes ahead to say that the design is recommended for educational and social research under which this research belongs.

Target Population;

This study was carried out in Nakuru County in Kenya and it involved 132 Public secondary schools out of a total of 345 schools. We did the study online in the months of March, April May and June 2020 when all schools had closed due to the pandemic and therefore there was restricted

movement. A total of 132 Principals, 264 Members of Boards of Management from all the schools used in the study were invited to take part in the study online. This brought the total number of respondents who participated in the study to 396. Using the Krejcie and Morgan table as observed by Mulusa, [12] and supported by Jamerson, J., [13], when the population is 30,000 then the sample of 379 is representative enough. Stratified and Purposive Random Sampling methods were applied in order to get the required sample of respondents and also the number of schools that were used for the study.

After getting the required sample for the study, participants were contacted through their Android phone calls, Google meetings, their email addresses and What Sapp Groups while questionnaires were emailed to them through their email addresses.

Research Questionnaire;

Data for this study was collected from respondents using questionnaires for Principals and Board of Management Members. Items in the questionnaires for the respondents focused on the stakeholders' preparedness to have schools reopened, role of members of Boards of Management in schools, role of local leaders and other stakeholders in helping schools reopen, community's preparedness in bringing the disease under control, students' secondary school education amidst COVID-19 pandemic, precautionary measures that schools had undertaken to combat the disease, modes of communication from ministry of health and education officials and the government's containment measures put in place in order to curb the spread of the disease. Data collected from the respondents was recorded and transcribed digitally while its analysis was presented in tables and graphs.

Validity of the Questionnaire;

Cohen *et al* [14], defines validity of the instrument used in a study as the degree to which correct inferences can be made based on results obtained from that instrument. It is worth noting therefore that, validity depends not only on the instrument itself, but also on the process of instrumentation of the group and the groups' characteristics that are being studied. After designing questionnaires with their items reflecting on the six objectives of the study, we ensured that questions in the instruments were all related to the accuracy of the research areas of concern. To achieve reasonable validity, research, instruments were subjected to experts in the area of study for expert analysis. This was in line with Mugenda and Mugenda [15], who asserts that content validity is judgment made better by groups of professionals and experts in the field of study. Their comments and suggestions were incorporated in preparation for the final questionnaires that were used for the study by clarifying ambiguities.

Reliability of the Questionnaire;

Reliability in this study was ensured by using test-retest technique whereby the same research instruments were administered twice to same groups of participants after an interval of two weeks. Both the results from the tests were then recorded, compared and correlated. The test retest method involved the following steps: - i) An appropriate group of participants was selected; ii) The test was then administered to the group; iii) All the initial conditions were kept constant then the same test was administered to the group for the second time. As per Daniels N.,[16] recommendation, a period of 2 weeks was provided; and, iv) The scores from both testing periods were then correlated. The Correlation Coefficient obtained was "the coefficient of reliability or stability". For a tool in this study to be considered reliable, the coefficient of reliability or stability must be over 70%. The Pearson Product Moment Correlation Co-efficient was used to determine the Correlation Co-efficient (r_{xy}).

$$r_{xy} = \frac{S_{xy}}{S_x S_y}$$

Where; x – result on the first score

y – result on the second score

r_{xy} – Correlation coefficient between x and y

$S_x S_y$ – covariance between x and y

$$\text{Cov}(x,y) - \frac{1}{n}\sum x_i y_i - \bar{x}\,\bar{y}$$

S_x – Standard deviation of x

$$S_x - \sqrt{\left(\frac{1}{n}\sum x_i^2\right) - \bar{x}^2}$$

S_y – Standard deviation of y

$$S_y - \sqrt{\left(\frac{1}{n}\sum y_i^2\right) - \bar{y}^2}$$

The correlation coefficient (r_{xy}) had a range that was between (0.6 – 0.9), it was then concluded that the two sets of scores were related and the tools were considered reliable as observed by Mugenda and Mugenda,[16]

Data Collection Procedure;

This study set out to collect data using open and closed-ended questionnaires. This was done in order to make sure more relevant information based on the variables under investigation was obtained from the respondents. As recommended by Effler, P.,[17] The study made sure that the questionnaires used were all coded and then given out to the respective participants already identified for the study through their email addresses. The main researcher and research assistants made sure that the questionnaires once filled were collected online either immediately or at a later convenient date. The researcher tried to ensure that, as much as possible, the questionnaires were filled and returned using the same email address already provided to all participants. Those who provided data through telephone calls had their responses recorded down. The researcher used ten research assistants who were thoroughly trained between 18th and 24th March 2020 on how to administer questionnaires and on how to receive data online after which they were set to contact and collect data from respondents spread across the 10 sub-counties in the county.

Methods of Data Analysis;

After collecting data and in order to have a more accessible and theoretically flexible qualitative data analysis, the researcher used thematic analysis, which as observed by Braun, et.al [18], enables a researcher to generate initial content codes based on the topic of the conversation. This included questions such as: 'What happened immediately after your school was closed down?'; 'What were learners expected to do at home for that period of school closer? Among others. These are examples of content codes that were found to be related to the pandemic experiences and participants' responses. The study further analyzed data collected using the lens of the ethical framework for pandemic planning proposed by Thompson et al [1]. The researcher while in the course of data analysis established that framing analysis in this manner gave rise to conceptual codes such as trust, duty of care, reciprocity and public protection. This framework was developed in order to enable institutional managers make evidence-based decisions and also give encouragement to those in management whose reflection is on important individual and societal values. All participants that were used for the study gave written informed consent before their participation in the study.

V. DISCUSSION OF THE FINDINGS

Under this section, the study presents results of the collected and analyzed data according to QSR International [19]: which recommends that analysis of data be based on research objectives and research questions that were generated for the study.

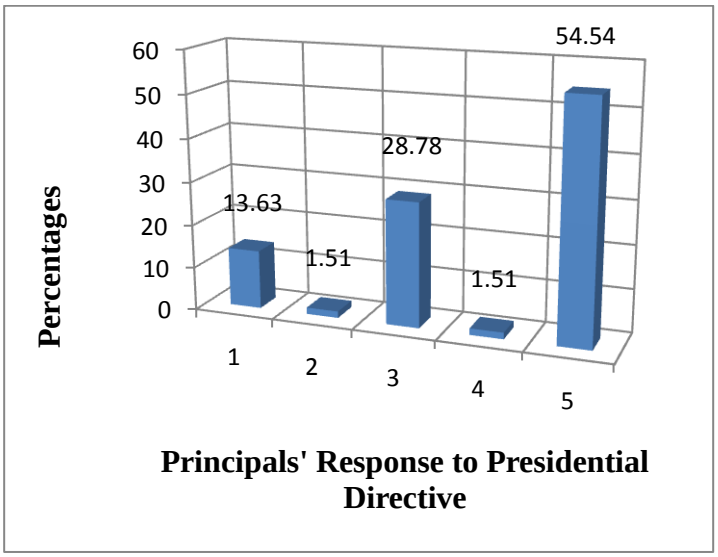
When Principals were asked to indicate how they responded to the closer of schools directive, their responses were as shown in table 1 below;

Table 1: Principal's Response to the Presidential Directive and Methods of communication used:

SN	Methods used to inform parents.	N	%	Response to Directive	N	%
1	Parents' Telephone Contacts	28	21.21	Sub-County Educ. Officers	18	13.63
2	School Notice Board	28	21.21	Staff Meetings	2	1.51
3	Students' Assemblies	48	36.3	BoM Meetings	38	28.78
4	School Printed Internal Memos	16	12.1	Public Health Officers	2	1.51
5	Parents' email Addresses	3	2.2	Assembling Staff & Students	72	54.54
6	Students' WhatSapp Groups	3	2.2			
7	Local & National Radio Stations	6:	4.5			
	TOTAL	**132**	**100.0**		**132**	**100.0**

When the president directed that all learning institutions be closed to bring the spread of COVID19-Pandemic's effects under control in the country, the study found out that all principals complied and students were sent home. The study established as shown in table 1 that, 56 principals who formed 42.4% used Parents' Telephone numbers and notice boards to communicate to parents about closers while 48 of them who constituted 36.3% used school assemblies. Sixteen (16) principals constituting 12.1% used internal memos while six (6) of them who formed 4.4% used Parents' email addresses and parents' WhatSapp Groups respectively. A few principals who formed 4.5% informed parents of their school closers through local and national radio stations. The study established that by the third day after the presidential directive, all boarders in all boarding schools had reached their homes. However, the study further established that, before principals closed their schools, they made consultations with various stakeholders and then went ahead to close schools as shown in figure 1 given below;

Figure 1: How Principals Responded to the Presidential Directive.



Majority of principals as evidenced by the findings in figure 1 who were 72 in number and who formed 54.54% responded to the presidential directive by assembling both staff and students in their schools before releasing them to their homes. Principals who were 38 in number and who formed 28.78% had meetings with their Boards of Managements while 18 of them who constituted 14.63% consulted their sub-county education officials. Two (2) principals who formed 1.51% indicated that, despite the presidential directive, they held meetings with staff to discuss the

directive and thereafter came up with methods of sending information to parents. Some, two principals who formed 1.51% contacted public health officers before closing. It is therefore important to note that, despite using various methods to respond to the directive and also communicate to various stakeholders, all schools complied and sent their students home as a way of combating COVID-19 pandemic's effects on learners.

The study further established that neither Principals, parents nor education stakeholders were prepared to have learners go home at that time. Results of interviewed principals showed that, schools were caught unawares and did not know how they were going to handle effects of the disease had students stayed in schools to continue learning. Results of the study indicated that stakeholders of schools did not have experience on how contagious diseases are handled in schools in case they attacked while schools were on session. This therefore revealed that there was no single school which was prepared to have learners continue with their studies in school amidst COVID-19 pandemic.

When Members of Boards of Management were asked to indicate their roles in combating Corona Virus Effects in their schools once schools reopened as a way of ensuring availability of conducive learning environments for their students in their schools, they responded as shown in table 2 below:

Table 2: Role of Boards of Management in Combating COVID-19 effects in Schools.

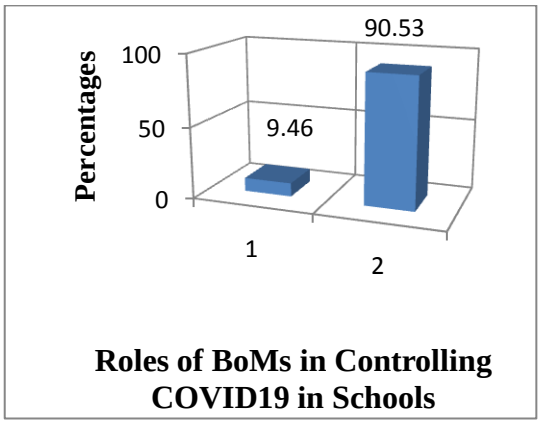
	School BoM Members' Roles	N	%
1	Managing Schools on behalf of MoEST	88	66.6
2	Advising Principals on Management Issues	13	9.8
3	Setting up School Policies	11	8.3
4	Assisting on Policies' Implementation	20	15.1
	TOTAL	**132**	**100.0**

Board members of secondary schools, who come from communities around schools, have various roles which they have to perform within the period they are serving as Board members. As managers of schools, they are supposed to come up with policies which ensure existence of conducive learning environments, the general safety of learners while in school and also policies which ensure implementation of school curriculum goes on as planned without any interruption. Besides, they are also expected to have in place, strategies for handling any contagious infection that may attack students while in school. By doing all this, then they are regarded as being prepared to have learners continue with their education while they are in school at all times. In relation to this therefore, the study sought to establish their level of preparedness in ensuring their schools were ready to observe Ministry of Health Protocols such as; observation of social distancing by staff and students while in the school compound, availability of masks to be won by students and staff all the time, thermo guns for daily measuring of temperatures of staff and learners, availability of sanitizers in schools, among others. Boards of Managements therefore, by ensuring full implementation of the ministry of Health's protocols in schools, were going to help in making sure school programmes were implemented uninterrupted when schools reopened after COVID-19. This would therefore be an assurance to all students that once they got back to their schools; they were going to continue with their studies without any fear of increased infections amongst themselves while in school.

When principals were asked to indicate major roles of the members of management, 88 of them who formed 66.6% said they manage schools on behalf of the Ministry of Education while 20 principals who formed 15.1% said Board Members assist in implementing school policies.

Thirteen (13) principals who constituted 9.8% indicated that they advise principals on school management issues while eleven (11) principals who constituted 8.3% said their major role was to set school policies. From the responses, the study therefore established that the boards of management have to ensure they come up with policies in their schools which will ensure when students get back to school, they are safe. As managers of schools, working together with school principals, they have the responsibility of ensuring that COVID19 pandemic's effects are controlled in schools and that learners were not infected when they returned. When they were asked to indicate what they have done in their schools in a bid to combat Corona Virus infection effects in their schools, their responses were as presented in the figure below:

Figure 2: What BoMs have done to ensure spread of COVID19 Infections are controlled when schools reopen.



The findings in figure 2 given here indicate that 90.53% of the principals who were 239 in number indicated that both Principals and Board members were all waiting for the Ministry of Education to give guidelines on how the spread of the virus was going to be controlled by schools while 25 principals who formed 9.46% indicated that Board Members had played no role at all in their schools. This therefore meant that, if schools reopened, learners were going to be more exposed to Corona Virus infections which would lead to more deaths and closer of schools for the second time. The study observed that it was going to be dangerous for the government to reopen schools for all learners when school managers were not prepared at all to receive them as doing so would lead to mass infections amongst learners that would result into high rates of deaths being pronounced in schools. Therefore, the study observed, students were safer staying at home.

The study wanted to know how schools had in the past handled calamities that befell them while on session as this was going to reveal to us whether school managers had required experience in tackling disasters such as Covid-19 pandemic. When Principals and Boards of Management members were asked as to whether they had Disaster Management committees in their schools which would deal with catastrophes such as Corona Virus, 108 Principals who formed 81.8% confirmed they had them while 24 of them (18.1%) said they did not. Their responses in regard to the roles such teams played in their schools were as shown in table 3 given below

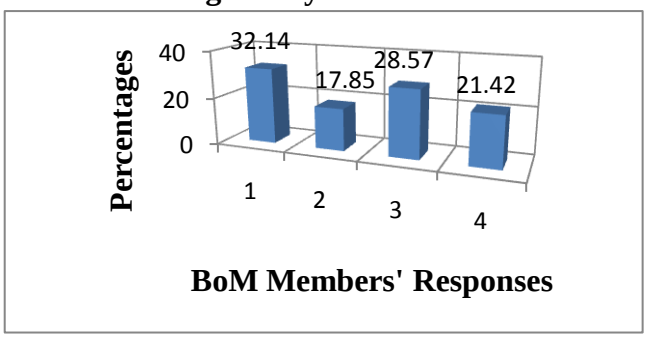
Table 3: Principals and Board Members Responses to Roles of Disaster Management Committees in Schools.

		PRINCIPALS' RESPONSES		BOARD MEMBERS RESPONSES	
SN	**Committees' Roles**	**Number**	**%**	**Number**	**%**
1	Investigate Courses of Such Disasters	8	33.33	9	32.14
2	Work out Solutions & give Recommendations	5	20.83	5	17.85
3	Assess Extent of Damages & their Budgets	8	33.33	8	28.57
4	Sensitizing	3	12.5	6	21.4

Staff & Students on their Effects				2
'AL	**24**	**100**	**28**	**100.0**

From Table 3 given here, majority of principals who were 108 in number translating to 81.8% indicated that they did not have Disaster Management teams or Committees in their school. Only 24 principals who formed 18.1% indicated that they had such committees in their schools. Out of the 24 principals who indicated they had disaster management committees, 16 of them translating to 66.66% said the major roles of such committees were to investigate courses of such disasters and give reports on the same to their principals and also assess the extent of damages and make budgets on the same respectively while 5 principals who formed 20.83% indicated that the committees work out solutions to such disasters and give recommendations on the same to principals. When BOM members were also asked whether their schools had Disaster Management Committees that helped in managing calamities that befell schools, 236 of them who constituted 89.39% said they did not have while 28 of them who constituted 10.6% confirmed they had such committees and went ahead to give their roles in school as shown in figure 3 given below:

Figure 3: Roles of Disaster Management Committees as given by BoM Members.



According to the responses given in figure 3, Board members who confirmed they had Disaster Management Committees in their schools gave same roles given by their principals in varying percentages as shown in the table and in figure 3 given herein. From the results given in table 3 and figure 3, the study confirmed that schools were vulnerable to more infections if the government was going to reopen them. Absence of Disaster Management committees in most schools meant that, in the event a calamity like COVID-19 was going to strike them again after reopening, schools were going to be closed for the second time hence limiting students' access to education.

The BoM Members who said they did not have Disaster Management Committees in their schools went ahead to say how calamities and challenging situations were handled in their schools and their responses were as shown in Table 4 below;

Table 4: Board Members' Responses on how Disasters were Managed in schools and their role in controlling COVID19pandemic before reopening of schools.

SN	How Disasters are managed in Schools	N	%	Roles of BoMs in Controlling spread of COVID19 when Schools reopen	N	%
1	School Principal	158	59.85	We have not played any Role	25	9.46
2	School Teachers	76	28.79	Waiting for MoEST guidelines	239	90.53
3	Police Officers	11	4.16			
4	Local Leaders and Stakeholders	6	2.27			
5	By		1.13			

	School Community	3				
6	I don't know	10	3.8			
	TOTAL	**264**	**100.0**		**264**	**100.0**

According to table 4 given herein, 158 BOM members who formed 59.85% indicated that when calamities and challenging situations strike in their schools, they are handled by school principals while 78 of them who constituted 28.79% said they are handled by teachers. Eleven (11) of them who constituted 4.16% indicated that such disasters are handled by the police.

Only 6 members who formed 2.27% said they are handled by local leaders and stakeholders from the community around the school. Three (3) members who formed 1.13% indicated that such situations are handled by the school community while 10 members who formed 3.8% said they did not know how such calamities were being managed in their schools!

It is therefore clear from the findings on table 4 that, managers of schools did not know that it was important to have disaster management committees in their schools which could handle disasters like COVID19 pandemic. This is a sad situation in secondary schools since disasters strike any time hence there should be teams that are mandated to ensure they are handled effectively so that they don't disrupt school learning programmes. The Ministry of education therefore need to ensure disaster management committees are established in all schools and that their members are trained on how to handle calamities as and when they happen to enable access to education by all learners become a reality in public schools. Principals alone, as indicated by majority of the respondents, cannot be left to handle difficult situations in their schools..

The study also analyzed the extent to which officials of the Ministries of Education and that of Health had created awareness amongst education stakeholders and the public in general on the existence and side effects of COVID-19 pandemic. This was thought to be important in this study as it was going to inform us on the level of awareness amongst students, stakeholders and the general public on the dangers posed by the disease. When all stakeholders are fully made aware of the effects of the disease, how it can be controlled and also how they can cope up with it and continue with their normal daily activities, it helps in reducing fear and anxiety amongst them and students will then get back to their schools when equipped with enough knowledge and skills on how to take care of themselves. This is regarded important as it enables them access education in their schools and proceed to university without any interruption. When principals were asked to indicate the roles played by the two key ministries in creating this awareness, their responses were as shown in table 5 below;

Table 5: Principals' responses on Roles Played by officials of Ministries of Education and Health in sensitizing school stakeholders and the general public on effects of COVID-19 pandemic.

SN	**Roles Played by MoEST in Schools**	**N**	**%**	**Ministry of Health's Roles in Schools**	**N**	**%**
1	Giving guidelines on Reopening Conditions to be met by all schools	34	25.75	Giving guidelines on Health Conditions to be met by all schools	**26**	**19.69**
2	Teaching	1	9.84	Testing all	**32**	**24.2**

	of students through Radio lessons	3		People of Corona Virus and Quarantining Suspected Cases		**4**
3	Conducting Televised Lessons to all students in the country	22	16.66	Giving Daily briefs on Spread of the COVID19 in the country.	**24**	**18.18**
4	Giving daily briefs on Learning status in the whole country	9	6.81	Sensitizing People on how to stay safe of Corona Virus	**24**	**18.18**
5	They have played no Role at all since all schools are closed.	54	40.90	Treating Corona Virus Patients who have been quarantined	**26**	**19.69**
	TOTAL		**100**	**TOTAL**	**132**	**100.0**

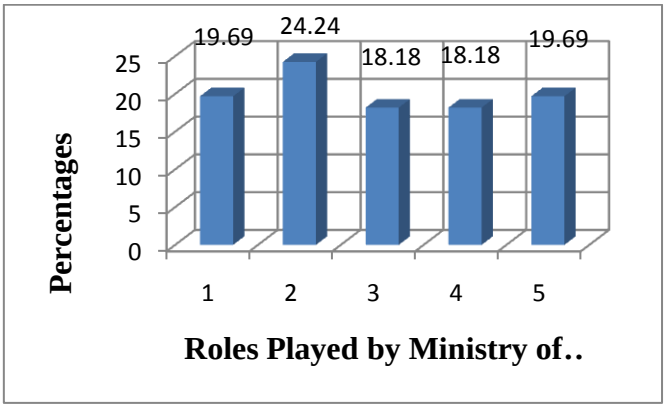
As indicated in Table 5 given herein, 34 principals who formed 25.75% indicated that the Ministry of Education had given schools guidelines on conditions they were to meet before reopening while 54 of them translating to 40.90% indicated the ministry had played no role at all since all schools were still being closed.

Beside, 13 principals who formed 9.84% indicated that the Ministry of Education had played the role of teaching all students through national Radio Broadcasted lessons while 22 principals who formed 16.66% indicated that the ministry played the role of conducting Televised Lessons to all students in the country. Nine (9) principals who formed 6.81% indicated that the ministry had played the role of giving the public daily briefs on learning status in the whole country.

In view of the responses therefore, the study noted that the ministry's efforts to bridge the gap that was left by teachers who were in their homes was recognized by the principals of the schools which participated in the study. Besides, the study further established that no public secondary school conducted any online lessons for their learners during the period schools were closed. This therefore meant that, since schools had not completed the syllabus by the time COVID-19 pandemic struck, when schools were to be reopened, students were to start their learning from where they had stopped hence there was need for the ministry of education to reassure them that they were going to continue with their education and recover time lost despite the scorching effects of the disease. Needless to say that stakeholder were to be fully prepared for reopening of schools by ensuring that Ministry of Health protocols were fully implemented in their schools before schools could reopen.

Given in the figure 4 below are roles the Ministry of Health had played during that period;

Figure 4: Principals Responses on the Roles the Ministry of Health had played in sensitizing people on effects of COVID-19 Pandemic;



From the information given in figure 4, 32 principals who formed 24.24% indicated that the Ministry of Health, had played the role of giving guidelines on health protocals that had to be met by all schools before they reopened while 48 Principals who formed 36.36% indicated that the ministry had played the roles of giving daily briefs to the public on the fast spreading effects of the virus in the country and that of sensitizing people on how they were to stay safe of Corona Virus Infection respectively. This therefore shows that principals were aware of the roles the ministry of Health was playing at that time. The ministry's daily briefs on the deaths and infection status helped students and stakeholders in understanding the dangers the disease posed on their heath and what they needed to do to remain safe.

This awareness further prepared students psychologically on what was expected of them once they returned to their schools to continue with their education. Despite the fact that their education had been disrupted, the daily briefs made them aware that the virus was fast spreading hence the need for them to develop healthy studying skills while at home so as to cover what teachers had not covered before closer of schools. When Principals were asked to indicate what they themselves and the Community around their schools had done in their preparation for the reopening of their schools, their responses were as shown in table 6 below:

Table 6 : Principals Responses on what they themselves and Community had done in preparation for reopening of schools;

SN	What Principals have done in Preparation for Reopening Of Schools	N	%	How Community has Prepared for Reopening of Schools	N	%
1	Informing Parents of Expected Health Changes to be met by Students in school	64	48.48	Reporting non residents suspected of Corona Infection to Health Officials	54	40.90
2	Informing Staff of Health Conditions to be met by all Staff and Students in school	26	19.69	Working as casual laborers in cleaning up the school compound	9	6.81
3	Informing BoMs on the Financial Implication expected in Effecting Health Conditions	34	25.75	Accepting the reality of Corona Virus's Existence and its effects	58	43.93
4	I have not done anything since I am at home and	8	6.06	Are willing to offer Security to both Staff and	11	8.33

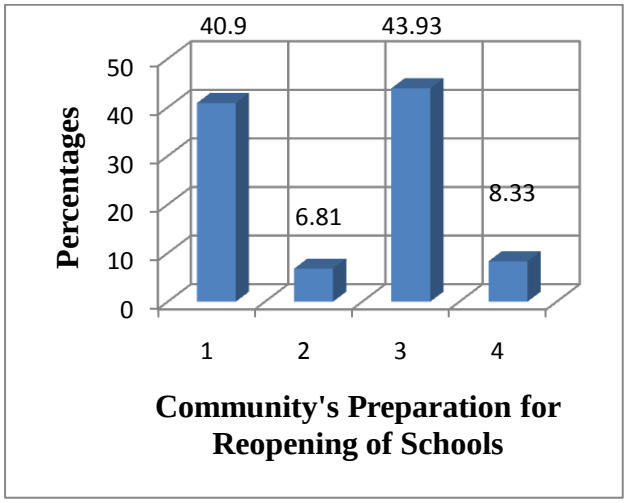
far away from my school.			Students when schools open		
TOTAL	**132**	**100.0**	**TOTAL**	**132**	**100.0**

From the findings on the table, 64 Principals who formed 48.48% said they had played the role of informing parents of the expected Health changes recommended by the Ministry of Health and which all schools were required to satisfy before reopening while 34 principals who formed 25.75% said they had informed Board Members of the Financial Implications if safety conditions set by the ministry of Health were to be met fully. Besides, 26 of them forming 19.69% reported that they informed all staff of the conditions set by the Ministry of Health while 8 principals who formed 6.06% said they had not played any role since they were directed to stay at their home hence had never gone to their schools.

The study therefore established that, since secondary schools which participated in the study were all public, principals were waiting for the Ministry of Education to fulfill the conditions set by the Ministry of Health in all schools and tell them what to do hence making them completely unprepared for the reopening of their schools. This sorry state therefore meant that students were to continue suffering at home by missing their secondary education.

When Principals were asked to indicate what the community around their schools had done in their preparedness for the reopening of their schools, their responses were as given in figure 5 below;

Figure 5: Principals Responses on Community's Preparedness on Reopening of Schools.



From the figure,58 principals who formed 43.93% indicated that communities surrounding their schools had accepted the reality on Corona Virus' existence and its effects hence were prepared to take Ministry of Health's advice on how to stay safe while 54 of them who constituted 40.90% indicated that members of their communities were involved in combating the spread of Corona Virus since they were reporting non-residents suspected to have contracted the disease to the Ministry of Health Officials working in their nearest Health Facilities. Besides, 11 Principals who formed 8.33% reported that members of their communities were willing to offer security to both staff and students when schools were reopened while 9 of them who formed 6.81% reported that members of their communities had volunteered to work as casual laborers in their schools so as to enable their schools meet the criteria set by Health Ministry for the reopening of schools in the county.

The communities around schools used for this study wanted schools to be reopened so as to have students in school as a way of reducing the then arising cases of early pregnancies and indiscipline amongst them. The study therefore established that the communities around the schools used for the study were aware of the dangers posed by the disease and were willing to have their children get back to schools and continue learning as they helped schools implement the Ministry of Health's set standards.

When BoM members were asked to indicate the role local leaders and other stakeholders of the school had played in preparation for reopening of their schools, and also to show whose responsibility it was to ensure Corona Virus disease did not spread in schools after reopening, their responses were as shown in table 7 given below;

Table 7: BOM's Responses on what Local Leaders and other Stakeholders had done in preparation for reopening of schools.

SN	Role of Local Leaders & Stakeholders In Controlling Corona Virus from Spreading.	N	%	Those responsible for controlling Spread of Disease	N	%
1	Issuing free Masks and Sanitizers to citizens	21	7.95	The School Principal	98	37.12
2	Giving food stuffs to the affected poor persons	15	5.68	Local Leaders and Stakeholders	56	21.21
3	Sensitizing People on the effects of the disease	9	3.40	All Teachers in School	104	39.39
4	They have not played any role at all.	219	82.95	Boards of Management	6	3.65
	TOTAL	**264**	**100.0**	**TOTAL**	**264**	**100.0**

From the findings in the table, 21 Board members who formed 7.95% indicated that Local leaders and stakeholders had played the role of issuing free masks and sanitizers to the communities around their schools while 15 of them forming 5.68% indicated that they played the role of giving food stuffs to most affected members of their communities. Nine (9) Board Members who formed 3.40% indicated that the local leaders and other stakeholders played the role of sensitizing people on the effects of the disease while the larger group forming 82.95% and who were 219 in number indicated that their local leaders and stakeholders had not assisted their communities in preparing for reopening of schools and also in controlling the spread of Corona Virus in any way. This therefore meant that majority of the local leaders and other stakeholders were relying on the Ministries of Education and that of Health to give finances and guidelines on how schools were to prepare for their reopening. However, the study established that stakeholders of schools were fully aware of what was needed in schools in order for students to resume learning when schools reopened.

When they were asked to indicate whether there were traditions and beliefs that determined the way people responded to COVID-19 pandemic, their responses were as shown in table 8 given below:

Table 8: BoM Members Responses towards Traditions and Beliefs which determined their response to combating COVID-19 pandemic;

SN	Traditions and Beliefs Hindering the Fight against COVID19.	N	%
1	The Disease is just like any other disease	36	13.63
2	Corona Virus does not exist	33	12.52
3	Disease is God's Punishment to humanity	63	23.86
4	Disease is work of Demons & Evil Spirits	98	37.12
5	Disease does exists and it Kills very fast	34	12.87
	TOTAL	**264**	**100.0**

The findings in table 8 given herein, show that 98 Board Members who formed 37.12% indicated that people living in the communities around their schools believed that Corona Virus was brought by demons and evil spirits while 63 of them who formed 23.86% indicated that the disease was as a result of God's punishment on humanity living on earth. In other words, this group felt that humanity had sinned before God and God was therefore punishing them. Besides, 34 who formed 12.87% indicated that the disease just existed like all other existing diseases while 33 Board Members who formed 12.52% felt that the said Corona Virus did not exist. From these findings therefore, the study established that traditions and beliefs in society paused great challenges to the efforts that were already put in place and which were meant to control COVID-19 pandemic's spreading effects amongst Kenyans.

VI. RECOMMENDATIONS

This study recommends that schools need to establish an infectious disease program and make public their policies on management of students who have chronic infectious diseases. After the infectious disease program and policies have been developed by the Boards of Management, the school administrator should delegate to the appropriate school staff the responsibility for implementing and maintaining the program. As observed by Halder N., et al [20], when delegating the specific tasks, the school administrator must be sure that the staff member who is delegated that task fully understands his or her responsibility in implementing the program. An understanding of the different types of infectious diseases is essential in planning and implementing an effective infectious disease management program. This will make schools be prepared well in advance on how to handle any outbreak of an infectious disease like COVID-19 pandemic in future.

Besides, the study also recommends all schools to urgently come up with disaster management committees to oversee existing and expected disaster risks' reduction and preparedness. Schools may empower an already existing committee, or come up with a new committee which will be tasked with the responsibility of ensuring disasters or calamities are managed as and when they happen. The committee should also be tasked with the duty to ensuring that decisions regarding the educational and care setting for infected students are based on the behavioral, neurological, and physical conditions of each particular student and the expected type of interaction with others in that setting as noted by Morrison, LG., et al [21]. These decisions are best made using the infectious disease review team, which should include the student where appropriate, the student's parent or guardian, the student's physician, the school nurse, local public health authorities, and personnel associated with the proposed care or educational setting. In each case, risks and benefits to both the infected student and others in the setting should be weighed. For infected students who may include neurologically handicapped students who lack control of body secretions, or who display behavior such as biting, the review team which is part of the disaster management committee shall consider recommending a more restricted environment for them.

This will go a long way in preventing and controlling infections in schools, protecting caregivers and patients themselves.

Thirdly, the study recommends that Boards of Managements, Principals and all secondary school stakeholders should ensure they have in place in their schools infrastructural facilities that conforms to the Ministry of Health's set health standards. As observed by Smith, RD.,[22] Boards of Management need to be in the forefront in creating policies in their schools that will ensure the safety of all learners and staff in those schools. Besides, the government through the Ministry of Education should provide funds which will be used to improve secondary education system across the country and to provide capacity training sessions to stakeholders of all secondary schools. Intervention measures should be initiated through a targeted approach which would bring about creation of suitable and affordable housing facilities to be used for studying amongst students hailing from vulnerable regions of the country and which meets all sanitization standards set by the Ministry of Health as a mitigation measure that will ensure the safety and health security of all learners during an outbreak of similar characteristics as COVID-19 pandemic.

The study finally recommends that, at this critical moment in the history of Kenya as a country, secondary schools should embrace online learning and adopt learning management systems which would enable them and their staff members conduct online learning programmes effectively during a pandemic period. Cauchemez S., et al[23] supports this view by saying that, long-lasting strategies need to urgently be established in order to build a vibrant education system in all secondary schools which will instill disaster management skills in all students as a way of enhancing their preparedness in handling and coping up with contagious diseases even long after completion of their respective courses of study. This will make them fully prepared to handle any new infectious disease that may attack and disrupt normal learning in schools and be ready to withstand effects of any future contagious viral disease that would be declared a pandemic like COVID-19.

VII. CONCLUSIONS

Despite the fact that Corona Virus currently is the most feared disease, Kenyans must understand that it is not the last epidemic that will threaten school continuities. We are all now aware of prevailing climatic changes globally that are currently influencing the manner in which infectious diseases occur and spread from one person to another. Managers of schools need to come up with stringent measures to ensure that any infectious disease that may erupt is countered effectively and brought under control. Schools must immediately and constantly be updating themselves with their emergency preparedness plans by coming up with plans which not only addresses preventions and safety measures for similar epidemics, but also those that identifies ways through which they can continue to educate and support learners and staff in times when schools are closed.

As pointed out by DOHA [24], managers of global education need to come up with policies and guidelines which could be used as and when epidemics like COVID19 erupt to minimize confusion and fear that was witnessed around the world when the Corona virus was declared a pandemic by WHO. At the same time, the global education community must come up with and strengthen surveillance teams which will be tasked with monitoring, evaluation, and proper documentation of the most possible alternative modes and methods of conducting flexible distance education to the affected learners. This would include coming up with ways of supporting the psychosocial well-being of all learners and staff in schools.

Ministries of Education globally need to invest a lot in new research and synthesize currently existing research that has been done on distance and flexible education interventions in crisis contexts that can be contextualized in schools so that next time when an epidemic strikes, schools are better prepared and equipped to not only protect their learners and staff, but also to continue with providing them with quality education. This will therefore ensure there is no valuable time lost in the schools' calendar.

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