

ISRG Journal of Education, Humanities and Literature (ISRGJEHL)



ISRG PUBLISHERS

Abbreviated Key Title: ISRG J Edu Humanit Lit

ISSN: 2584-2544 (Online)

Journal homepage: <https://isrgpublishers.com/isrgjehl/>

Volume – I Issue- VI (November-December) 2024

Frequency: Bimonthly



Assessing the challenges faced by educational institutions during covid-19 pandemic in Sierra Leone. Case study: Institute of Public Administration and Management

PETER SAHR BRAIMA

Lecturer, Department of Educational Foundations, Ernest Bai Koroma University of Science and Technology, Sierra Leone.

| Received: 03.12.2024 | Accepted: 04.12.2024 | Published: 17.12.2024

*Corresponding author: PETER SAHR BRAIMA

Lecturer, Department of Educational Foundations, Ernest Bai Koroma University of Science and Technology, Sierra Leone.

Abstract

Since the onset of the COVID-19 pandemic, many universities and medical centers have faced many challenges. After the outbreak of the COVID-19 pandemic, the implementation of distance education and the development of online teaching and training has become one of the most urgent research topics in the world. The main objective of this study is to assess the challenges faced by educational institutions during the COVID-19 pandemic in Sierra Leone. This study used a mixed methods approach to determine the impact of COVID-19 on educational institutions in Sierra Leone. A mixed methods approach was chosen to complement the methods of data collection, analysis, and discussion of findings and recommendations. The study was conducted at the Institute of Public Administration, University of Sierra Leone, Freetown. The site was chosen because the university is facing many challenges due to the COVID-19 outbreak that has affected its operations as an educational institution. The target population for this study included staff and students of the Institute of Public Administration and Management (IPAM) and selected citizens (the general public). Three categories of respondents were purposively selected from two institutions and a sample of 40 students, 25 faculty members, and 10 staff members from the general public (randomly selected) were conveniently selected to volunteer for the study. Three methods of data collection were used in this study: questionnaires, semi-structured interviews, and document review. According to the findings, respondents were asked if their educational institution faced educational challenges during the COVID-19 pandemic. IPAM was considered an institution that faced challenges, especially during the COVID-19 pandemic.

Keywords: COVID-19, pandemic, educational institution, challenges, university, education officials

Introduction

Since the outbreak of the COVID-19 pandemic, many universities and health centers have been facing challenges. Educational leaders have tried to deal with the new situation, but the human resource infrastructure was unprepared for such an eventuality. After the outbreak of the COVID-19 pandemic, the implementation of distance learning and the development of online education and training have become one of the most pressing research topics worldwide (Jacques et al., 2020, 2021; Zagkos et al., 2022).

Global studies focus on how education responds to the challenges of a completely new situation in which distance learning has become the only form of knowledge acquisition and learning. The initiatives of the consortium of participants of the World Educational Leadership Symposium (Vachkova et al., 2022) and the international project World School Leadership Study [WLSLS] (Gorgen et al., 2020)) serve as examples of global projects.

COVID-19 has forced 191 countries to close educational institutions, leaving 1.5 billion children out of school. Prolonged school closures could have serious implications for the education and future life chances of young people in developed and developing countries, with the poorest and most marginalized children most affected. According García & Weiss (2020), while school closures are necessary for public health reasons, there are growing concerns that they could further widen the gap between children in disadvantaged and more advantaged communities.

Most studies have focused on assessing general levels of anxiety and depression related to the pandemic (e.g., Barzilay et al., 2020; Horesh & Brown, 2020; Salari et al., 2020). Other alarming features of the burden associated with the COVID-19 pandemic have been documented, such as increased alcohol consumption (Fruehwirth et al. 2021), sleep disorders (Huang et al., 2020), loneliness, and decreased academic motivation (La Rosa & Commodari, 2023). University experience during the first two waves of COVID-19: students' experiences and psychological wellbeing. *European Journal of Investigation in Health, Psychology and Education*, 13(8), 1477-1490.). However, most studies adopted standardized measures used in other contexts of stress and trauma without adapting them specifically to the current pandemic situation.

A recent systematic review by Salari et al., (2020) analyzed the prevalence of stress, anxiety, and depression in the general population during the COVID-19 pandemic and found that the prevalence of anxiety was 31.9% and the prevalence of depression was 33.7% (Salari et al., 2020). In the context of COVID-19, young people in both the United States (Liu et al., 2020) and Israel (Achdut & Refaeli, 2020) are vulnerable to symptoms of depression, anxiety, and PTSD. Aristovnik et al. (2023) focused specifically on students, conducting a large-scale survey of 30,383 students from 62 countries during the first wave of the COVID-19 crisis and global lockdowns in early 2020. The results showed that while most students were satisfied with their university's support in the transition to online learning, a lack of computer skills and a perception of increased workload prevented them from seeing an improvement in their performance in the new classroom environment. Furthermore, students reported boredom, anxiety, and frustration.

However, little is known about specific COVID-19-related stressors beyond the general anxiety caused by the pandemic. Kleiman et al. (2020) used a smartphone-based ecological snapshot

of COVID-19-related anxiety with six assessments per day and showed that the proportion of daily responses with the highest levels of COVID-19 anxiety was seven times higher than the proportion of daily responses with the highest levels of COVID-19 anxiety. Specific worries associated with COVID-19-related stress in the face of the pandemic include direct contact with the disease, fear of infection (Schiff et al., 2020), fear of infection of relatives (Cao et al., 2020), and previous. These include trauma (Płomecka et al., 2020), isolation (Husky et al., 2020), female gender (Zhao et al., 2020), loneliness (Horesh & Brown, 2020), pre-existing physical health problems (Brooks et al., 2020) and pre-existing mental illness (Płomecka et al., 2020).

Other studies have focused on identifying various protective factors related to COVID-19, such as resilience (Barzilay et al., 2020). Using a large international sample, Płomecka et al. (2020) found that optimism, the ability to share concerns with family and friends, and daily exercise predicted reduced psychological symptoms. The importance of social support in coping during times of stress is widely recognized in the literature. The crucial importance of social support in the context of COVID-19 in the adaptive management of the pandemic is especially important given the significant impact of social distancing in the context of preventive measures for the health crisis (Saltzman et al., 2020). The role of social support in improving perceived coping among university students, where the social sphere is central, requires further investigation.

This challenge has become even more complex for medical schools, as it has not only led to an increased demand for clinical and administrative support from them but also placed additional pressure on these universities to develop appropriate teaching strategies for medical students. In other words, in this situation, medical schools and healthcare professionals, in addition to their important role of fighting this epidemic, must ensure that their educational programs are appropriate and effective. Furthermore, they must maintain quality education for students at all levels. This has led universities and medical schools to cancel face-to-face classes and regular seminars to reduce the risk of infection, forcing professors and students to use online and virtual classes until the epidemic is over. In other words, the traditional teaching pattern has never been challenged in this way.

In Sierra Leone, the outbreak of the disease caused all medical universities to suspend face-to-face classes and continue teaching in a virtual environment. During this period, classes were held in the form of recorded lectures, both online and offline. In online classes, due to internet speed limitations, there is usually only audio interaction between lecturer and student. In the offline format, lecturers usually record their comments on PowerPoint slides and upload them to an LMS for students to access.

The COVID-19 pandemic is not the first experience to have affected education, especially medical education. The 2014 SARS (Ebola) epidemic affected education, although it was less severe. However, the impacts of the COVID-19 pandemic will be much more widespread and long-lasting. Therefore, examining the challenges that the current pandemic is posing to medical education can help us to better adapt to the new situation and ensure continuity of training. It can also help us prepare to minimize interruptions to medical training in the event of an emergency. This is a special opportunity for medical schools to examine the impact of the crisis on medical education and training and ensure quality medical education even during an epidemic. In

addition to the need to identify challenges that must be addressed immediately to minimize damage, such a crisis also allows faculty to take advantage of new technologies in medical education. Therefore, this study examines the challenges and opportunities that the COVID-19 pandemic poses for medical education. The COVID-19 pandemic has affected most countries in the world, and there are specific reports on the impact of the pandemic on students (e.g., Aristovnik et al., 2020; Tasso et al., 2021). Interestingly, the focus has been on several individual psychosocial variables related to students' responses to the pandemic, such as sociodemographic factors (e.g., gender), the type and extent of exposure to the pandemic, and various risk and protective factors. In contrast, relatively little attention has been paid to the larger context in which students are embedded, which means there is a lack of studies comparing the responses of students in different countries. Although vaccination might be expected to have similar effects in many countries, the psychological and functional impacts of the pandemic may vary across contexts.

There is considerable evidence that individuals with similar characteristics may respond differently in different circumstances (Astor & Benbenishty, 2019; Benbenishty et al., 2005; Zayas et al., 2002). About COVID-19, different countries have experienced the pandemic differently, and the severity of the burden of the virus varies across countries. Some countries have robust health systems that have been able to respond relatively effectively, while other countries' systems have been overwhelmed. Furthermore, some countries have responded with extreme measures (e.g., total lockdowns), while others have been less restrictive. It is therefore very likely that students in different higher education systems across countries have responded differently to the global health crisis due to differences in various university and government policies and services. Given these differences, an individual's perceived health status and pre-existing physical illnesses (Brooks et al., 2020; Rodríguez-Rey et al., 2020) may be additional risk factors that hinder coping with the challenges of COVID-19.

Aim/Objective

The main objective of this study are as follows:

1. To assess the challenges faced by educational institutions during covid-19 in Sierra Leone.
2. To identify the specific Challenges facing mitigation measures

Materials/Methods

Study design

This study used a mixed approach to assess the impact of COVID-19 on educational institutions in Sierra Leone. A case study research design was adapted for this study because it allowed data to be collected from a wider area. The case study design allowed the results to be generalized to a larger population and to draw conclusions about the characteristics of the study sample. This study systematically and objectively used quantitative research methods to select and examine the sample and generalize the results (Jacobs & Sorensen, 2019). However, qualitative research considers data collection from the perspective of informants in their natural environment (Jacobs & Sorensen, 2020). Mixed methods research allows researchers to organize data and results simultaneously or sequentially to understand a research question. A mixed methods approach is chosen to complement the methods of data collection, analysis, and discussion of results and recommendations.

Study Area

The study was carried out at the Institute of Public Administration, University of Sierra Leone, Freetown. The area was chosen because the university faced many challenges due to the outbreak of the COVID-19 pandemic that affected its functioning as an educational institution. However, the researcher's social and cultural ties to the area influence the decision regarding the study area.

Population

Population refers to the subject of the study. This can include individuals, institutions, products, and events (Weiman & Kruger, 2015). The subjects of this study consisted of staff and students of the Institute of Public Administration and Management (IPAM) and selected citizens (general public).

Sample and sampling methods

According to Creswell (2015), a sample is a subset of the target population that the researcher wants to study in order to generalize the results within the study population. The purpose of sampling is to obtain respondents who can provide information that reflects similar behaviors and characteristics as the population (Creswell, 2012; Kothari, 2017; Leedy,

2016). Three categories of respondents were purposively selected from both institutions and a sample of 40 students, 25 faculty, and 10 staff from the general public (randomly selected) were conveniently selected to volunteer for the study. Staff, department heads, and selected students were obtained through convenience sampling (see Table 3.1). The employees and selected general public were selected based on their role in the economic development of the country using stratified and systematic sampling techniques. When employees volunteered to take part in the survey, the various departments and disciplines in their respective classes were automatically included in the survey.

Table 1: Sample of Informants in the Study Area

Informants	Number	Percentage (%)
Other Staff of IPAM	10	13.3%
Lecturers from the institution	25	33.3%
Students from the institution	40	53.3%
Total	75	100%

Source: Field Data, 2024

Data collection method

The researcher used both primary and secondary sources of data for the study.

Primary data

Primary data was collected using survey methodology. This involved distributing questionnaires on the challenges posed by COVID-19 to educational institutions in Sierra Leone using the study area as the primary source and collecting data from key respondents and experts. To achieve the aim and objective of the study, a questionnaire containing closed and open questions is developed to collect information from eligible respondents. The questionnaire provided multiple options and allowed respondents to express their ideas by selecting from the options provided.

Secondary data

This includes data collected by someone other than the user. The benefit of using secondary data is that much of the necessary

background work has already been done or analyzed (Funsho, 2012). The data is already there, so evaluate it before using it. This includes desk review of both published and unpublished materials such as policy documents, newspapers, internet, magazines, articles, reports, newsletters, etc. Secondary sources provide a deeper understanding of public information on the impact of COVID-19 on educational institutions in Sierra Leone. The information collected from these sources helped in the second stage of constructing the questionnaire, distributing it, and collecting data from key respondents.

Data collection and instruments

Data collection methods involve collecting information based on variables of interest to reflect directions that help the researcher answer the research questions and objectives (Kothari, 2010; Sapsford & Jupp, 2012). Three data collection methods were used in this study: questionnaires, semi-structured interviews, and document review. Tools such as questionnaire guidelines, semi-structured interview schedules, and document review guidelines were also used in this study.

Questionnaires

This is a technique that involves the use of structured and unstructured questions where individual respondents write their responses and send them back to the researcher (Creswell, 2012; Mzezele et al., 2013). Researcher used structured questionnaire formats to collect data from respondents. This method uses a questionnaire guide to collect data on the perceptions, opinions, challenges, and suggestions of staff, faculty, and students regarding the impact of COVID-19 on educational institutions in Sierra Leone. This method was selected because it encourages respondents to reflect on their feelings and express ideas that they consider more important in response to the questions.

Semi-structured Interviews

Interviewing is a technique of collecting information from interviewees through oral or written questions (Mzezele et al., 2013). In this study, a semi-structured interview schedule or guide is used to collect data from respondents such as staff, faculty, and students. Data was collected from designated respondents on their understanding of the impact of COVID-19, government containment strategies, challenges in implementing and enforcing the strategies, as well as suggestions to improve the future implementation of strategies to combat COVID-19, particularly with the emergence of this type of pandemic. The researcher chose this semi-structured interview because it can provide first-hand information from the participants' natural environment; therefore, the data assisted to answer the research question.

Documents

Document review is a technique that provides secondary data such as papers, conference papers, dissertations, textbooks, newspapers, etc. (Scott, 2018). The researcher chose the document review technique to be able to collect data on the impact of COVID-19 on educational institutions in Sierra Leone. The data collected by the institute relates to the challenges in fighting the epidemic. This technology provided the researcher with the opportunity to collect qualitative and quantitative data on implementing policy recommendations.

Data presentation and analysis

Presentation of data

It is a research process in which raw data is organized, summarized, and arranged in a way that is easy to use and manages

to answer the question under study (Smith, 2011). This process requires computer software to analyze and display the data in various forms. However, the data was subject to a content analysis framework for the qualitative information obtained through interviews and document review. Statistical computer software (SPSS 22 version) was used to analyze the quantitative data obtained through questionnaires and document reviews. The analyzed data is presented in various forms such as charts, themes, quotes, and graphs.

Data analysis

Results and analysis

Age of the respondents

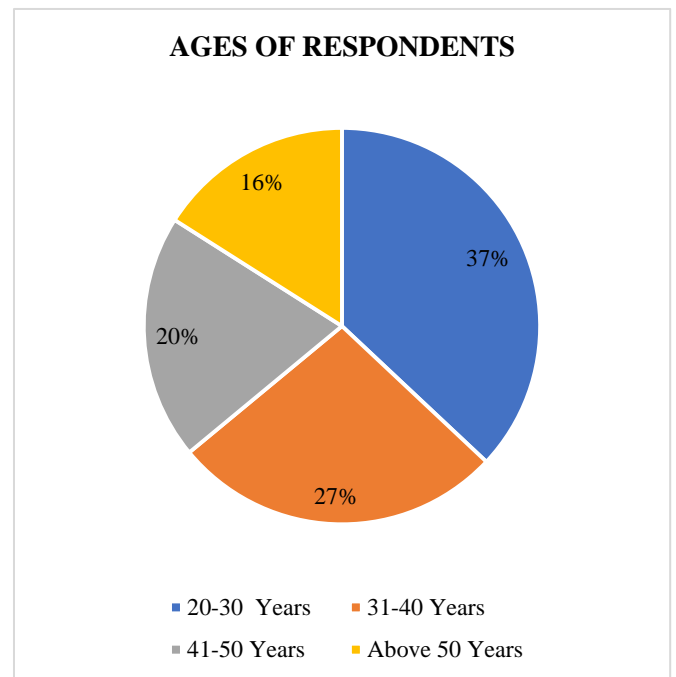
The researcher was interested in finding out the age distribution of the respondents, so they were asked to provide the age distribution of the respondents. Their responses are presented in Table 2 below:

Table 1: Distribution of the Respondents by Age

Age Distribution	Frequency	Percentage (%)
20 – 30 years	28	37
31 – 40 years	20	27
41 – 50 years	15	20
Above 50 years	12	16
Total	75	100

Source: Field data 2024.

Figure 1: Distribution of the Respondents by Age



The data presented in Figure 1 above shows that the majority of the respondents were between 20 and 30 years of age, 28 (37%). This was followed by 20 people (27%) between 31 and 40 years of age. Another group of respondents who participated in the study were between 41 and 50 years of age, accounting for 15 people (20%). Those above 50 years of age were 12 people (16%), proving to be the oldest of all the respondents. All these age groups provided important input to the study and a total of (100%) people participated.

Gender Distribution

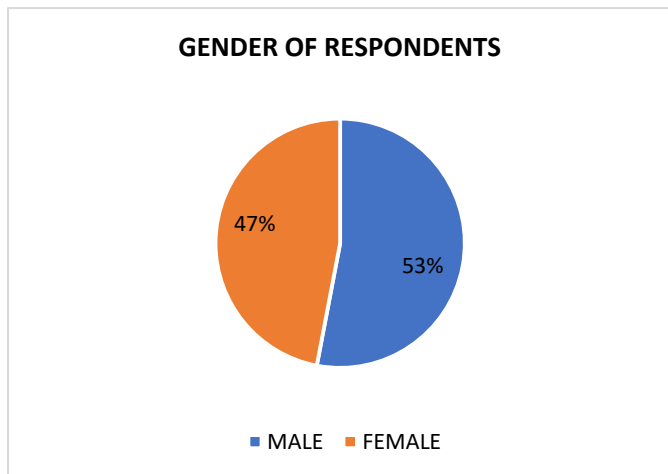
During the study, respondents were asked to indicate their gender. Their answers were collected, analyzed, and presented as follows:

Table 3 Distribution of the Respondents by Gender

Gender	Frequency	Percentage (%)
Male	40	53.3%
Female	35	46.7%
Total	75	100%

Source: Field Data Survey, 2022.

Figure 2: Distribution of the Respondents by Gender



From the information presented in the above table, majority of the participants were male, 40 (53%) of the respondents were female and 35 (47%). This shows a gender imbalance in the representation/distribution of the respondents. However, this result suggested that the researcher gave preference to the male gender or the female respondents were not as readily available or willing to participate as the respondents.

Educational Background of Respondents

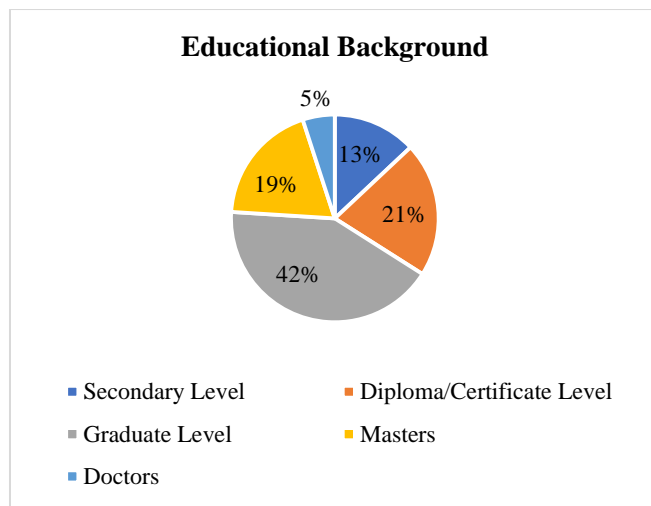
The objective of this study was to identify the highest educational background of the respondents in order to determine their understanding of the study and the appropriate way to present their answers in the questionnaire and interviews. The information collected was analyzed and is presented in Table 4 below.

Table 2: Educational Background of the Respondents

Educational Background	No. of Respondents	Percentage (%)
Secondary level	10	13%
Diploma / Certificate level	16	21%
Graduate level	31	42%
Masters	14	19%
Doctors	4	5%
Total	75	100%

Source: Field Data Survey, 2024.

Figure 3: Educational Background of the Respondents



According to the data presented in the table above, the respondents held different level of education that were deemed necessary to the study. The majority of the respondents were seen to be more educated. This was based on the data 31(42%). Following this were those who reached Diploma/certificate level 16 (21%). For the level of Masters, 14 (19%) said they have such education. However, 10 (13%) of the respondents mentioned secondary school level as their educational attainment. This result implied that the majority of the respondents were formally educated even though there are others with lower levels of education in the public.

Challenges faced by educational institutions during the COVID-19 pandemic

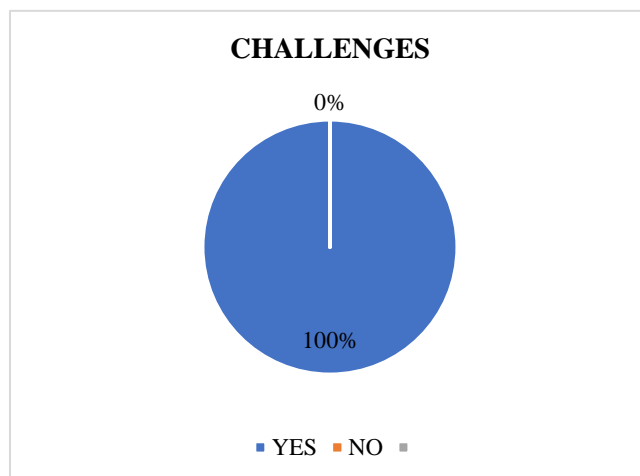
The objective of this study was to highlight the problems faced by the government in terms of corrective measures. Therefore, respondents were asked to identify the problems they are facing. Their responses were collected, analyzed and presented in the table below.

Table 5: IPAM was viewed as one faced with challenge especially during the Covid-19 outbreak. Do you agree to this view?

Responses	No. of respondents	Percentage (%)
Yes	75	100
No	0	0
Total	75	100

Source: Field data 2024

Figure 4: Challenges



According to the above data, respondents were asked if their educational institution faced educational challenges during the COVID-19 pandemic. All respondents answered "yes". IPAM was considered an institution that faced challenges especially during the COVID-19 pandemic.

Identifying specific Challenges facing mitigation measures

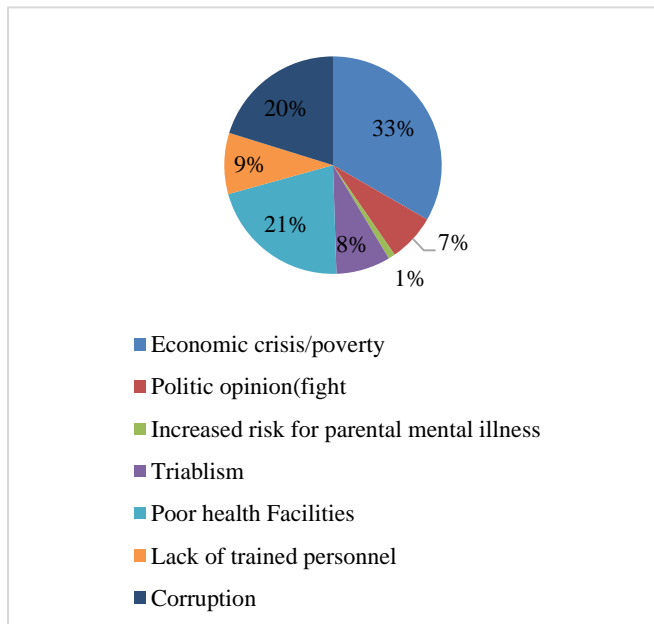
The objective of this study was to identify the challenges facing mitigation measures. Therefore, respondents were asked to identify the problems they are facing. Their responses were collected, analyzed and presented in the table below.

Table 6: showing those specific challenges facing mitigation measures

Challenges	No. of respondent	Percentage (%)
Economic crisis/poverty	25	33
Politic opinion(fight)	5	7
Increased risk for parental mental illness	1	1
Tribalism	6	8
Poor health facilities	16	21
Lack of trained personnel	7	9
Corruption	15	20
Total	75	100

Source: Questionnaire issued, 2024.

Figure 5: Challenges facing mitigation measures



The data presented on table 6 showed several challenges faced by mitigation measures. According to 25(33%) of the respondents mentioned economic crisis/poverty, 5(7%) of those respondents stated politic opinion as a challenges affecting the implementation of the measures,1(1%) of the respondent another challenge was increased risk for parental mental illness, 6(8%) of the respondents said any challenges encountered was tribalism as certain tribe believed that if they take the vaccine it will destroy their tribe because tribe is not one ruling, and 16 (21%) respondent

responded saying poor health facilities was another challenges faced.

Another set of respondents 7(9%), mentioned lack of trained personnel, culminated by diseases and mortality as a challenge faced by government in the fight Covid-19 in Freetown- Sierra Leone

Challenges faced was also said to have caused by Corruption. This was according to 15(20%) in Freetown.

Conclusion

In conclusion, the respondents in all age group participated one hundred percent and they all provided significant inputs to the study. However, this result suggested that there was gender imbalance in the representation/distribution of the respondents as the researcher gave preference to the male gender or the female respondents were not as readily available or willing to participate as the respondents. Findings also implied that the majority of the respondents were formally educated even though there are others with lower levels of education in the public. Furthermore, all respondents answered "yes". IPAM was considered an institution that faced challenges especially during the COVID-19 pandemic. Finally, results showed several challenges faced by mitigation measures. The respondents mentioned economic crisis/poverty, politic opinion, increased risk for parental mental illness, tribalism, poor health facilities, lack of trained personnel, and corruption.

Recommendations

The following suggestions are given for practical activities by stakeholders, such as the government, water businesses or authorities, policy makers, non-governmental groups, etc., based on the study’s findings and conclusions. However, this study suggests the following recommendations:

- 1) As a way forward, the immediate focus on the nation should be on measures to contain the spread of the disease COVID-19 and to treat the individuals infected. The ability to stop its spread and treat the sick will have very positive consequences on the economy.
- 2) Priority should be given to underprivileged students who cannot afford to buy all necessary equipment such laptop.
- 3) Management should provide financial support to all underprivileged students with zero interest rates
- 4) Management should consider arranging high-speed internets for all existing students.
- 5) The institutions’ premises should be marked, indicating all the social distancing signs and safety-related posters.
- 6) The information board should incorporate all insights on COVID-19, and hotline numbers of hospitals and clinics.
- 7) University counsellors must organize a new online webinar aimed at minimizing mental stress faced by students and staff.
- 8) The education institutions’ counsellors should be more flexible than before, because students might need their help more than ever.
- 9) Since Sierra Leone educational institutions have decided to continue with the online mode of teaching for long, they need to ensure the availability of adequate cyber security, and provide subsidy to students for the acquisition of the necessary electronic devices like laptops, computers, printing machines, etc

- 10) . The government should provide subsidies for students to procure high-speed internet.
- 11) The institutions should put in place committees for curbing any unexpected crisis. Members of such committees may consist of faculty members, administrative staff, and students.

Conflict of interest:

The author declare that he has no conflict of interest.

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