American Journal of Management Science and Engineering
2021; 6(5): 161-172
http://www.sciencepublishinggroup.com/j/ajmse
doi: 10.11648/j.ajmse.20210605.13
ISSN: 2575-193X (Print); ISSN: 2575-1379 (Online)

COVID-19 in Ethiopia: Policy Stance, Leadership Response, and Challenges

Mulat Abebel Reta

African Leadership Excellence Academy, Addis Ababa, Ethiopia

Email address:
Mulatabebel12@gmail.com

To cite this article:
Mulat Abebel Reta. COVID-19 in Ethiopia: Policy Stance, Leadership Response, and Challenges. *American Journal of Management Science and Engineering.* Vol. 6, No. 5, 2021, pp. 161-172. doi: 10.11648/j.ajmse.20210605.13

Received: August 21, 2021; **Accepted**: September 7, 2021; **Published**: October 30, 2021

Abstract: International community impacted by the incidence like COVID-19 in different point of time. The virus caused by RNA virus that belongs to the family of CORONA (Latin Crown, from the structure of the virus under electron microscope) virus. The world both developed and underdeveloped nations has been challenged/challenging by the virus significantly. It was the first reported in China in Wuhan City at the end of 2019. The disease began to create destruction and the devastating effect of the pandemic forced the World Health Organization to declare it as a global pandemic. COVID-19 is animals and the virus spread in the form of human-to-human transmission. Physical contact and respiratory routs are the two most important well-established routs of transmission of the virus. Poor hand hygiene practice, overcrowding, and close physical contacts like hand shaking contributes for the fast spread of the virus with in very short period. In China the disease was first recognized shows educating the public is proven as a key in preventing transmission. The main objective was to explain and explore the practice of leadership response, policy stance and challenges of COVID-19 in Ethiopia. The report includes describing the response of leadership and policy stance of stance of Ethiopian government towards COVID-19 lesson from Ethiopia. The major purpose of this desk review was to arrive at synthesis opinion, analyses the data, evaluate the practice of COVID-19 protection, and provide possible conclusion and recommendation to for further regulatory directives and research issues of the government of Ethiopia. Qualitative research techniques have been used for the desk review. The method includes literature review by analyzing secondary data, research findings, and case analysis. The major governmental response of Ethiopia was like closed schools due to COVID-19 on 16 March 2020, following the declaration of the virus as a pandemic by the World Health Organization on 12 March 2020. The Ministry of Education of Ethiopia developed a 'Concept Note for Education Sector COVID-19 Preparedness and Response Plan' on 3 April 2020. The national COVID-19 prevention guideline dictates the roles and responsibilities of Health care workers' Rights, Employers and managers in health facilities and Health care workers. Though, the government doing things well, since June 2020, the number of identified COVID-19 cases has increased substantially in Ethiopia. There are insufficient network capabilities, high-quality digital education resources, and teacher capacity in use of information technology, and online teacher-student interaction and emotional communication.

Keywords: COVID-19, Leadership Response, Policy Stance and Challenges

1. Introduction

The world experienced with different pandemic various in different point of time. According to report of World Bank [1], the severe acute respiratory infection remains one of the leading causes of mortality around the world.

The recent pandemic caused by an RNA virus that belongs to the family of CORONA (Latin Crown, from the structure of the virus under electron microscope) virus is a challenge for both developed and underdeveloped nations. Moreover, Sansa, 2020 COVID-19 is the novel coronavirus, which goes with the name severe respiratory syndrome coronavirus-2 (SARS-COV-2). Scientists have associated this virus with the disease referred to, as COVID-19, and it was the first reported in China in Wuhan City at the end of 2019. Soon after, this disease began to create destruction and the devastating effect of the pandemic forced the World Health Organization (WHO) to declare it as a global pandemic.

The evidence provided in the literature indicates that the source of the COVID-19 is animals and the virus spread in

the form of human-to-human transmission. As Sansa stated that, COVID-19 transmitted through respiratory droplets that human beings sneeze, cough, or exhale.

World Health Organization has recognized the disease as global public health emergency after cases had started to seen outside china in less than two-month period. However, there was failure to predict, reluctance to use initial information timely and take the necessary actions together with lack of political commitment in nations across the world contributed to the rapid spread of the disease out of China and unacceptably high mortality in countries most affected by the pandemic. Physical contact and respiratory routs are the two most important well-established routs of transmission of the virus. Poor hand hygiene practice, overcrowding, and close physical contacts like those that hand shaking contributes for the fast spread of the virus with in very short period. Experience from China where the disease was first recognized shows educating the public about the nature of the disease and the rout of transmission, restricting mobility of individuals within the border and across borders is proven as a key in preventing transmission [2].

Countries all over the world, has been starting to educate the society about the pandemic and the ways to protect it. However, Davis K. [3] evidenced that, COVID-19 has both supply-side shocks and demand shocks. The author went on to argue that both aspects would have an impact on international trade in goods and services. For example, even before the outbreak of the COVID-19 pandemic, the world was dealing with the learning crisis, evidenced by high levels of learning poverty as part of social crises [1]. Moreover, according to the World Bank [1] the spread of COVID-19, among several disruptions to normal life, necessitated more than 160 countries to effect temporary closure of schools. Further, the World Bank estimates that the closure of schools has left 1.6 billion children and youth out of school.

In the world, the government forced to enact a national lockdown, which meant that there was total closure of all schools, including universities. This caused a halt to the learning process. There is concern among some in society that the widespread school closures would lead to not only loss of learning, but also loss of human capital and diminished economic opportunities in the end [1]. Therefore, the virus affect several human beings phenomenon like social movement, economic development and political capacity of the countries. Countries warried and searching the medication. Thus, the governments in the world have brought forth some mitigation measures, such as utilizing remote learning to manage and cope with the crisis, researching the vaccines and introducing different protection mechanisms as COVID-19 protocols. The same to Africa.

In addition, the world take measures to addressing economic shocks and the costs of social service such as, education. According to UN [4], Cash transfers have been shown to be an effective means of increasing girls' participation in education and can be delivered through mobile phones. Whilst it should be noted that cash transfers do not appear to be a cost-effective way to improve learning outcomes of girls in school, there is a reasonable body of evidence from lower and middle-income countries. Cash transfers can mitigate the negative impacts of the economic shock of the pandemic for the lower-income households.

In the case of pandemic, health leaders should provide proactive regulatory policy and leadership response. The Director-General, World Health Organization and Matshidiso who is Regional Director for Africa, World Health Organization addressed the leadership response in different way forwards. For instance, Tedros forward the following leadership statements and messages for regulation on 2020.

"… In recent years we've seen YOUNG PEOPLE leading grassroots movement for climate change and racial equality … now we need young people to start a GLOBAL MOVEMENT for HEALTH - for a world in which health is a HUMAN RIGHT, not a privilege".

… The best way to suppress transmission and save lives is by engaging individuals and communities to manage their own risk and take evidence-based decisions to protect their own health and that of those around them".

The pandemic has disrupted the lives of billions of people. It is completely understandable that people want to get on with their lives … but good to know that we will NOT be GOING BACK to the "old normal". Our lives have already been changed by the pandemic, and part of adjusting to the "new normal" is finding ways to live our lives safely … highly depends on where you live and your circumstances … it is all about making GOOD CHOICES.

Do not expect someone else to keep you safe. We all have a part to play in protecting ourselves and one another … always keep informed about the situation in your surrounding and practice the required preventive measure.

Everyone should treat the decisions about where to go, what to do and who to meet as a matter of life-and-death exercise.

Good to know that our choices could be the difference between life and death for someone you love, or for a complete stranger … not only for our own selves.

We must remember that most people are still susceptible to this virus … as long as it's circulating in the community, everyone is at risk.

Just because cases might be at a low level where we live doesn't make it safe to let down our guard.

No matter where you live or how old you are, you can be a leader in your community, not just to defeat the pandemic, but to BUILD BACK BETTER.

In the African Region, there were different COVID-19 response regulated. To this end, African health professional leaders and organizations forward measures and the expected challenges. For example, WHO [2] stated that over 10,000 health workers on the frontlines have been tragically infected with COVID-19 since the beginning of the pandemic.

One of the biggest challenges in protecting health workers have been the global shortage of personal protective equipment (PPE).

Health workers have concerns about taking the virus home.

Health workers also suffer psychosocial pressures from working around the clock.

In some communities, health workers even face stigma and discrimination.

The African diaspora has been significantly involved in helping to disseminate information, training, and improving skills … they have also mobilized support for the response in the Region.

The need for member states and partners to come together to ensure all our health workers are informed and protected is so massive.

In the case, Matshidiso who is Regional Director for Africa, World Health Organization forward the following leadership speech as a response and regulatory policy stance:

"… One infection among health workers is ONE to MANY. Doctors, nurses and other health professionals are our mothers, brothers & sisters … and they are helping to save lives endangered by COVID-19" and "We must make sure that they have the equipment, skills and information they need".

"We all have a role to play in limiting the spread of COVID-19 … wearing masks, washing hands, and physical distancing will protect our communities, so DON'T LET YOUR GUARD DOWN"!

COVID-19, and Policy and Leadership Response in Ethiopia.

In Ethiopia, the existence of the COVID-19 confirmed by Federal Ministry of Health on March 13, 2020, in Addis Ababa. The case is a 48- year old Japanese man reported to have traveled from Japan to Burkina Faso who arrived in Ethiopia. He developed symptoms and presented at the health center in Addis Ababa [5]. The pandemic started when the world was not ready even for commonly known epidemics and when mobility for business and tourism was high and very simple due to globalization. Scarcity of supplies for hand hygiene and lack of the most health facilities are good evidences for our unpreparedness for an infectious disease pandemic of this scale. Ethiopia has put in place a disease surveillance program since the outbreak of COVID-19 in China, and it has now identified the first positive case in the country.

Since Ethiopia is developing country, the economic, social and political frustration has been started. The country has limited trained human and material resources, is expected to affect mostly by the global COVID-19 pandemic. Though, MoE design directives like higher education intake strategy of 70: 30 (40 percent engineering, 30 percent science and 30 percent social sciences the limited human and technological resources the country challenged by technological illiteracy, lack of technological capabilities and infrastructure [6]. The question here is how this policy or directives achieved with poor provision and utilization of ICT at schools in such the case of COVID-19.

Ministry of Education [7] found that, universities in Ethiopia have numerous senior and young academic staff employees are equipped with low level of scientific skills and low potentials to solve problems of industries. Here, the major question raise in the mind of policy researchers, policy makers and executives how to achieve national vision "to see Ethiopia become a country where democratic rule, good governance and social justice reign upon the involvement and freewill of its peoples, and once extricating itself from poverty becomes a middle-income economy?" in the case of pandemic like COVID-19. In 2019 the incidence called COVID-19 virus created in the World and economic and social aspects including education comes to collapse and the problem profound at developing countries including Ethiopia and reach at stopping academic calendar of schools to university. Thus, if we have technologically trained and capable human capital and technology infrastructure, the teaching learning process could not be negatively influenced by COVID-19 virus. The government also assured that the different sectors face/d serious shortage of trained work force to imitate foreign technologies and subsequent innovative activities.

However, with the above human and material resource limitations the government of Ethiopia forwards leadership message, response, and regulatory daily operation to react the problem of COVID-19. To be practical higher officials including the Prime Minister Abiy and Lia Ethiopian ministry of health, minister forward the following message.

… As part of the move to increase our current daily testing capacity, we have made orders to import one million COVID-19 testing kits … indeed; we received the first installment this week.

ETHIOPIA will start domestic Production of COVID-19 testing kits by October 2020.

… COVID-19 is showing a sharp rise in ETHIOPIA with big numbers of new cases reported for a single day. To curb this, we have to abide by the health rules, ALWAYS!

Once again, I urge everyone to follow the simple guidelines consistently to protect YOURSELF, YOUR FAMILY and the COMMUNITY.

Moreover, ministry of Ethiopia with the help of other health institution has started to allocate the limited resources for the prevention of transmission of the disease and implementation of a uniform, evidence based preventive, and treatment protocol at all levels of health care system and throughout the country under central command. In order to make all preventive and treatment endeavors uniform in Ethiopia the national COVID-19 prevention and treatment guideline the committee was organized from consultants of different specialties and given the task of developing evidence based, cost effective and applicable national guideline for prevention and treatment of COVID-19 in Ethiopia.

With help of national guideline for prevention and treatment of COVID-19 proposed and put into practice measures. While there is still much to learn about COVID-19, people can take action to prevent the disease through simple, day-to-day measures. The precautions are:

Regularly and thoroughly wash your hands with soap and water and use alcohol-based hand sanitizer.

Maintain a physical distance of at least one meter,

particularly if a person is coughing.

Persons with persistent cough or sneezing should stay home or keep a social distance, and not mix in crowds.

Make sure you are coughing into a tissue or a bent elbow, and make sure to safely dispose of the used tissue afterwards.

Stay home if you feel unwell with symptoms like fever, cough and difficulty in breathing. Please immediately call for medical help using the EPHI toll free number-8335- that is available day and night.

Stay informed on the latest developments about COVID-19 through official channels.

The Ethiopian ministry of health formulated and implemented the national regulatory guideline for prevention and treatment of COVID-19 starting from after April 2020.

The policy incorporates the risk communication and community engagement integrated model that used for communication tool for 2019 novel corona virus (COVID-19). These are risk communication, internal, partner communication and coordination, public communication and communication engagement with affected communities and dynamic listening and rumor management [5].

Ministry of health with the cooperation of governmental and non-government organizations has been trying to implement the national guideline and specific directives starting from 2020 in general. In between the implementation of all protection procedures, it has started received 2.184 million doses of the Astra Zeneca COVID-19 vaccine via the COVAX Facility on 07 March 2021 at Addis Ababa. The government has started to introduce COVID-19 vaccine in a national launching ceremony on 13 March 2021. The Ministry of Health of Ethiopia launched COVID-19 vaccine introduction in a high-level national event held at Eka Kotebe COVID-19 Hospital where frontline health workers were vaccinated to mark the beginning of the vaccination campaign. As per the Ministry of Health's aim, 20% of the population in Ethiopia is planned to be vaccinated by the end of 2021 [2, 5].

2. Objective of the Desk Review

The main objective of this desk review was to explain and explore the practice of leadership response, policy stance and challenges has been facing because of COVID-19 in Ethiopia.

2.1. Specific Objectives

What policy decisions/response and communications conducted by the government and the stockholders?

Are the roles and accountabilities across different levels of the government system clear about COVID-19 protection?

Identified most vulnerable groups of the society and intervene accordingly.

What technology-measures implemented and improved for social service delivery?

What adaptive and evidence-informed leadership role exercised and the challenges facing?

2.2. Scope of the Desk Review

The Desk Review Report scoped to review and describe the response of leadership and policy stance of stance of Ethiopian government towards COVID-19. The review report includes policy decisions/response and communications held, roles and accountabilities across stockholders, technology-measures implemented and improved and leadership role exercised and the challenges facing as a result of COVID-19.

2.3. Limitation of the Desk Review

Information collected through the literature review and capturing best practice technique by analyzing secondary data. The techniques might be missing details, components or underreporting the specific issues, also it is important to acknowledge that the completeness of data may vary time-to-time and author to author. Consequently, the conclusions and recommendations should also be considered with caution.

2.4. The Purpose of Desk Review

Desk review is an in-house analysis of cost report data submitted by the provider. It more than collecting data. Instead, it is to review previous research findings to gain a broad understanding of the field by collecting, organizing and synthesizing available information, the team gains an understanding of the country context. Therefore, the major purpose of this desk review is to arrive at synthesis opinion, analyses the data, evaluate the practice of COVID-19 protection, and provide possible conclusion and recommendation to for further regulatory directives and research issues of the government of Ethiopia.

2.5. Methodology of the Desk Review

Qualitative research techniques have been used for the desk review:

Literature review by analyzing secondary data: During the desk review national guideline for prevention and treatment of COVID-19 in Ethiopia, assessment and article reports, and other related documents) has been synthesized, analyzed and reviewed. The second methods of the desk review was capturing best practices by analyzing of secondary data, research findings, and case analysis and web pages.

3. Findings across Specific Objectives

3.1. Government Policy Decisions/Response and Communications

Ethiopia is East Africa's largest aviation hub, so measures to respond to COVID-19 started early on. In January, the government of Ethiopia introduced passenger-screening protocols at Addis Ababa's international airport, and further preparation continued in January and February. The first report of a COVID-19 case in Ethiopia was on March 13, two days after the global pandemic was declared. National responses were scaled up soon after, and a state of emergency

was declared on April 8 [8]. The cases and deaths of Coronavirus currently-July 02, 2021, 08:20 GMT esteemed Cases: 276,250 and Deaths: 4,325.

In Ethiopian COVID-19 has been different negative impacts on social, political and economic perspectives. In case, the government frustrated and design some regulatory measures. Ethiopia was also on the throes of its most important political transition in a generation, with a major opening-up of political and civic space and plans underway for the country's elections. In several aspects, therefore, Ethiopia was better positioned developmentally to withstand and overcome the crisis than many others in SSA. The government of Ethiopia taken the first measure like closed schools due to COVID-19 on 16 March 2020, following the declaration of the virus as a pandemic by the World Health Organization on 12 March 2020. The Ministry of Education of Ethiopia developed a 'Concept Note for Education Sector COVID-19 Preparedness and Response Plan' on 3 April 2020. The objective of the response plan is to ensure the continuity of general education, which was disrupted by the COVID-19 pandemic, and contribute to the effort of containing the spread of the virus [4].

The day-to-day aggravation of the virus pushing the governments of Ethiopia to design and implement different ways of prevention mechanisms like formulation of directives and guidelines on April 2020. The guideline includes specific policy narratives.

The ways of rumor investigation and verification: contact identification and definition.

Infection prevention and control during healthcare,

Fumigation and appropriate chemicals,

Laboratory testing for COVID-19,

COVID-19 triage protocol: pre-triage format for COVID-19 infection,

Case management (triage and management of suspect and confirmed cases),

Death care and burial, ethical issues in COVID-19 management,

Risk assessment and management of exposure of health care workers in the context of COVID-19,

Rights, roles, responsibilities, occupational safety and health of health care workforce in the management of COVID-19 patients in Ethiopia.

Health care facility COVID-19 preparedness protocol like safe removal of PPE.

Risk communication and community engagement (RCCE) 2019 novel corona virus (COVID-19) disease preparedness: RCCE partners (internal & external coordination).

Table 1. *Summary of COVID-19 Preparedness and Response in Ethiopia.*

Policy Documents	Theme for COVID-19	Dates
Guideline	National regulatory guideline for prevention and treatment of COVID-19	April 2020
Standards	Standards for quarantine, isolation and treatment centers	April 2020
Interim protocol	Infection prevention and control interim protocols in health caring centers	April 2020
Guide	Quarantine& border control implementation guide…	July 10,2020
Protocol …	Protocol for transporting COVID-19 patients	June 2020
Plan	National Action Plan	June 2020
Strategy	RCCE for Ethiopia	March 2020
Project Information Document	Ethiopia COVID-19 Emergency Response	March 2020
National Implementation Guide	Home-Based Isolation and Care	March 2020

Source: [9]

The research question raised was "what policy decisions/response and communications conducted by the government and the stockholders as per the regulatory guideline formulated?" for the different assessment researches conducted in the country. Mainly the assessment comes with different findings.

Tadesse Anberbir [6] found that, the level of awareness has been improved through time yet there is still a need to expand the means to reach the right and timely health information to the minorities and indigenous communities. The study reported that they do not have access to the main media such as TV giving the fact that they are living in the very remote areas where infrastructures are poor. Limited access to the means of prevention such as Personal Protective Equipment's (PPEs), pure water supply, hygiene and sanitary facilities. In case, Most of the policy measures and safety net programs were targeted the urban poor yet the rural poor where most of the minorities reside were left untouched. Researchers as Mekonen H. [9] found that there is low levels of risk and impacts perception, the majority of the people have low perception of taking Coronavirus as a threat. The existence of poor knowledge and poor practice were respectively high. Moreover, there are low educational status, rural residence, and low monthly income were significantly associated with poor knowledge and poor practice.

The funds allocated to the health and social service for minorities were not clearly designated and never reported how much of the federal and regional governments were allocated for them. Moreover, the findings indicated that, the increased spread of COVID-19 in those regions even makes the problem worse. Persons with Disabilities has been facing a wide range of survival problems as they depend on others for mobility. The curfew measures has affected some of them in a way that they were not even able to move out to beg for alms. However, the federal government has ratified many international regulations on Persons with Disabilities; most of them seems not implemented. Thus, the policy failed to integrate the unique needs of Persons with Disabilities. The study has also found out that, there was a lack of transparency in the usage of the public finance of COVID-19

interventions both at the national and regional levels. Such trend might give rise to corruption and nepotism [6].

In addition, Kebede A. [8] also found that, Ethiopia has come a long way in the daily number of tests and tests per capita are still low. There are multiple factors that may play a part, including resource constraints, travel restrictions, competition for available resources and global supply chain disruptions. With such limited capacity for testing which will determine the proportion of the Ethiopian population infected over time (including asymptomatic cases) will help public health officials plan for future healthcare needs. The survey can also track how infections progress through the population over time and assist planning of public health responses. Personal protective equipment must available, for not only health workers responding to COVID-19 but also those providing services in direct contact with patients. Public awareness and community engagement are critical parts of the response.

Furthermore, UNICEF [10] found that public health emergencies have shown in conflict-affected and fragile settings, public health emergencies are likely to increase social tensions, heighten group discrimination, incite unrest, and can lead to political instability, exacerbating conflict dynamics. This pandemic is likely to deepen suspicion and grievances based on existing patterns of exclusion, particularly around access to social services. Government containment and mitigation measures, restriction of movement, as well as disruption of social services – aggravated by the economic crisis affecting vulnerable households, may trigger fear and anger against frontline workers and authorities. There is also the risk that response measures will lead to regressions in the protection of child rights. These dynamics pose a duo risk to children: limiting the impact of the health responses; and potentially exposing communities to heightened violence and rights violations. Generally, Mekonen H. [9] stated that Ethiopia faced the onset of the crisis with clear strengths rather than effectively implementing the regulation policy of the government of Ethiopia.

In terms of politics, according to Davis K. [3] postponed parliamentary elections scheduled for 29 of August. Then, a couple months later, the government decided to postpone the election until 2021. Furthermore, the federal government accordingly faces a constitutional crisis with limited options for addressing it. A growing number of protests across the country coupled with long internet outages have not helped the storyline. Previous elections in the country have been soiled with allegations of intimidation and voter rigging. The government had promised free and fair elections as part of his liberalization and reform agenda. Ethiopian government appears prepared to test the structure of its parliamentary democracy by relying on input and opinions from the Council of Constitutional Inquiry, which in theory is independent but, as in any democracy, is merely an advisory body to the parliament, which is controlled by the ruling party.

Furthermore, the Ethiopian election was largely being viewed as a test of the reformist platform, especially considering the polls would have been the country's first true democratic election in 15 years. Also explained as Ethiopia's decision to postpone its August 2020 elections indefinitely has raised political temperatures in the country, as both the government and opposition parties accuse each other of attempting a power grab [11].

Social services have been frustrating because of COVID-19. In case of health care, the cases and deaths of Coronavirus currently-July 02, 2021, 08:20 GMT esteemed Cases: 276,250 and Deaths: 4,325 and schools in Ethiopia closed due to COVID-19 on 16 March 2020, following the declaration of the virus as a pandemic by the World Health Organization on 12 March 2020. As UN [4] stated that greatest disruption in educational opportunities for Ethiopian children in more than a generation.

26 million children (77% of whom are primary school pupils) affected by school closures.

Loss of access to vital school feeding programs: 0.6 million children affected in Addis Ababa alone.

Learning outcomes expected to suffer, especially in the case of children from poor households.

Higher risk of permanent dropout from schooling by children from poor households.

The Ministry of Education of Ethiopia developed a 'Concept Note for Education Sector COVID-19 Preparedness and Response Plan' on 3 April 2020. The objective of the response plan is to ensure the continuity of general education, which was disrupted by the COVID-19 pandemic, and contribute to the effort of containing the spread of the virus. As schools in Ethiopia prepare to reopen following the COVID-19 pandemic, they urgently need to understand the impact that school closures have had on the education system in order to identify appropriate measures for reopening schools safely. Too often, the perspectives of school principals and teachers are missing from this planning, yet they are place to provide information on the challenges faced [12].

3.2. Clear Roles and Accountabilities Across Different Levels of the Government

National COVID-19 prevention guideline dictates the roles and responsibilities of Health care workers (Health Work Force) Rights, Employers and managers in health facilities and Health care workers (Health Work Force) at section XII. The guideline also includes the recommendation for different stakeholders. Federal authorities such as Ministry of Health, Civil Service Authority, Ministry of labor, Federal prosecutor, Regional government authorities, professional societies as well as front line staff. This recommendation engaged to ensure proper working environment, take measures to minimize and address risk to HCWs caring for patients in the face of COVID-19 as well as respond to necessary compensation and work environment standards. Facilities should also strive to provide a safe work environment and address existing and emerging concerns. As outlines in the document, health professionals expected to

respond to the national public health emergency in a professional and ethical manner.

The government of Ethiopia delegated the roles and responsibilities to the lower level of the governmental and non-governmental governance. However, researches indicated that COVID-19 situations gain the highest momentum by increasing alarmingly. It shows significant differences after months since March 2020 it has reported the first case in Ethiopia. The government took several measures ranging from public health emergency response to the state of emergency. The communication strategy and state of emergency are in place to reduce the prospective risks of COVID-19. The strategy segmented the population by tailoring activities of risk communication and community engagement at all levels. The government has strongly obtained various measures like lockdown and a state of emergency. However, it was not strict and has not been heavy-handed that much.

The research findings indicated the cases and deaths are non-stoppable. The government is using several strategies and need to strengthen those efforts to mobilize and upbeat the Knowledge Attitude Perceptions of the public through different communication forms to reinforce the existing efforts and alleviate socio-cultural, political, economic factors to drive out COVID-19 among the people. For example, the government formulate and implement guidelines relates to roles and responsibilities of different actors in the education sector at provincial and localized levels. For example, it is unclear which responsibilities or decisions sit with local education officials, head teachers, teachers or parents in education sectors. One explanation for this lack of information might be that the country has a no structured system with a clear chain of command, embedded responsibilities and accountabilities.

3.3. Technology-measures Implemented and Improved for Social Service

Technology is vital for holistic development of the country through assisting sectors i.e., social, economic and service of the country. For example, technology like internet enable the society well aware of the government activities like policies and strategies of social, political, economic issues in particular and the World in general. Technology has also varies roles in economic sector such as e-commerce (e-marketing, e-banking, e-mail marketing, mobile banking…) which has positive and significant role to be fast in delivering service with cost effective ways in terms of time and the situation of pandemic like CORONA (COVID-19). In case, Ethiopia taken measures.

Though the government doing things good, since June 2020, the number of identified COVID-19 cases has increased substantially in Ethiopia, due to both expansion of community transmission (as anticipated by epidemiological models), as well as significant improvements in testing capacity for detection. Research findings moreover indicates the following limitation in terms of technology transformation. Laboratory and testing capacity: the national capacity of confirmatory testing has increased substantially across all regions [1]. In addition, researchers Adugna A. [13] justify that Ethiopia reported the first COVID-19 case on 13 March 2020. Limited molecular laboratory capacity in resource-constrained settings is a challenge in the diagnosis of the ever-increasing cases and the overall management of the disease. Screening at Points of Entry – Travelers' health screening: it has instituted at points of entries. Health screening of passengers for COVID-19 at international airports and designated ground crossings has been underway and there are 27 active passengers screening points in the country. Isolation, quarantine, and treatment centers: As of June 15, 332 isolation, 50 quarantine, and 64 treatment centers had been established providing services. Mandatory quarantine of passengers coming to Ethiopia at designated hotels and quarantine centers has been in place since March 23, 2020. The Millennium Hall (exhibition center) has been converted into a COVID-19 isolation and treatment center with about 1,000-bed capacity.

Furthermore, research result indicates the case of Surveillance and contact-tracing [13]: Toll-free call centers are up and running 24 hours a day, seven days a week, at the national and subnational levels, with an average of 8,000-10,000 calls being responded to daily. Contact tracing and follow-up with persons who had contact with confirmed cases are ongoing. Home-based quarantine is being implemented for contacts of confirmed cases, accompanied by laboratory testing and follow-ups by health professionals. However, laboratory testing and clinical works were/are too limited in practical. The government also launched Communication strategy: A Risk Communication and Community Engagement Strategy has been developed, and dissemination of messages has commenced. This includes the insertion of a recording at the beginning of all phone calls with information on how to prevent the coronavirus. Within these above responses/remedies, the government faced/ing political tasks like election and social services.

Since technology is mandatory for service sector, it vital for assisting teaching-learning practice to enhance and assure quality education. To achieve quality education, machinery, equipment, and other facilities required for provision of education service and assist teaching and learning process online. Delivering teaching-learning process online is more significance during the case of incidence such as CORONA (COVID-19) to make teaching-learning process accessed at the home, stay safe, and keep well from virus through mobile technology. Ethiopian government respond through developing the standards, guides and protocols documents. The documents developed by assessing the situations, impacts and risks of COVID-19 pandemic. One of the most important documents is a risk communication and community engagement mechanism in Ethiopia that aimed to have and create a mutual understanding of preparedness and response to minimize the effects of COVID-19. During COVID-19, the education sector massively adopted digital transformation tools from primary education to higher education. The COVID-19 motivated the creation of virtual

learning, the use of zero-rated applications and educational websites, launching of group telegram and plan to have digital in the sector generally.

Several studies found out that, governmental efforts have not been enough to reduce the spread of the virus. Studies also recommends that, the government should pay attention to high-risk and vulnerable groups to enhance their implementations. Moreover, the government could not pay attention to high-risk and vulnerable groups to enhance their implementations. Education sector including higher education challenged by technological illiteracy, lack of technological capabilities and infrastructure. The idea supported by Tadesse Anberbir [6] and Ministry of Education [7]. Moreover, desk review shows MoE design directives like higher education intake strategy of 70: 30 (40 percent engineering, 30 percent science and 30 percent social sciences). The question here is how this policy or directives achieved with poor provision and utilization of ICT at schools.

Obviously, improving the competency of students at different grade levels enable students ready them to enhance technology capability after graduation. Also found that, universities in Ethiopia have numerous senior and young academic staff employees are equipped with low level of scientific skills and low potentials to solve problems of industries. Here, the major question raise in the mind of policy researchers, policy makers and executives how to achieve national vision "to see Ethiopia become a country where democratic rule, good governance and social justice supremacy upon the involvement and freewill of its peoples, and once extricating itself from poverty becomes a middle-income economy?" Achieving this vision and its mission needs human capital. The government also assured that the different sectors face/d serious shortage of trained work force to imitate foreign technologies and subsequent innovative activities that helps the sector during the incidences called CORNEA (COVID-19) virus [7]. Moreover, the adaptive and evidence-informed leadership role exercised and the challenges facing.

COVID-19 pushes the service system. One of it is online education practice. It has exposed outstanding problems such as insufficient network capabilities, insufficient high-quality digital education resources, and insufficient teacher capacity in use of information technology, and insufficient online teacher-student interaction and emotional communication. Within these all problems, the leadership of the country is/was under challenging condition.

In Ethiopia, different government layers responded different leadership measures to COVID-19. For this participatory leadership style put in place. The style tried to promote measures that put people at the center and protect them and their rights whilst also conserving vital economic and financial assets and systems; recognize and target those sectors and groups that are most severely impacted and are either already or likely to be left behind; avoid distortions in policy and investments that turn temporary measures into permanent 'giveaways' unless deliberately designed as incentives connected to longer-term development objectives; and more resilient, productive, greener and sustainable future for Ethiopia. To implement these leadership measures the government design different leadership coordination path that indicated as follows.

Table 2. *Regional COVID-19 Leadership Coordination Arrangements: Summary.*

Region	Motivated	Stakeholders	Leaders
Amhara National Regional State	Emergency Committee	Regional office	Regional head of EPHI
Afar National Regional State	Task Force	Regional office	Regional President
Benishangul Gumuz National Regional State	Steering Committee	Cabinet members	Regional President
Gambela National Regional State	No formal Forum	Health cluster members	Regional Health office/WHO co-chairs
Oromia National Regional State	Steering Committee	Regional office heads and partners	Office of the President & ODRMC
SNNP	Task Force	Regional office heads	Regional President
Somali National Regional State	Regional State EOC	Regional office heads and partners	Regional HB
Tigray National Regional State	Regional State EOC	Regional office heads and partners	Regional Health office
Harari	Task Force	Regional office heads and partners	Regional President
Dire Dawa	Steering Committee	City office heads	City Mayor

Source: [9]

However, the government tried to take measures explained above the government has been faced and facing leadership challenges. According to studies of UN [4] and UNICEF [10] leadership has been challenging. These are:

The pandemic has revealed the existing inequalities across the nation.

The government facing a double burden due to the pandemic not to mention the prevailing challenge that they are forced to live with.

Most of the budgets were targeting the urban population which lacks to address the minority groups and indigenous communities who are living in a very remote and rural areas.

Most of the regional governments lack transparence in how and where those budgets has been allocated. Thus, poor reporting and budgeting has observed.

The lockdown has not been heavy-handed.

Economic activities, especially agriculture and industry, have continued with a view to maintaining food security and preventing unrest.

Weak health system, poor nutritional status, lack of access to proper hygiene and sanitation and densely populated urban areas.

The governmental efforts have not been enough to reduce the spread of the virus. The government should pay attention

to high-risk and vulnerable groups to enhance their implementations.

There is no strong clinical services and public health research.

Public health emergencies are likely to increase social tensions,

Heighten group discrimination, incite unrest, and can lead to political instability,

Exacerbating conflict dynamics. The pandemic is deepen suspicion and grievances based on existing patterns of exclusion, particularly around access to social services.

Government containment and mitigation measures, restriction of movement, as well as disruption of social services – aggravated by the economic crisis affecting vulnerable households – may trigger fear and anger against frontline workers and authorities.

There is also the risk that response measures will lead to regressions in the protection of child rights.

Generally, these above challenges challenged Ethiopian government adaptive and evidence-informed leadership role.

The leadership roles of higher officials goes to introducing COVID-19 vaccine. The introduction of vaccine launching through ceremonies, which also held at all the regional capitals in Addis Ababa, 13 March 2021. The Ministry of Health of Ethiopia launched COVID-19 vaccine introduction in a high-level national event held at Eka Kotebe COVID-19 Hospital where frontline health workers were vaccinated to mark the beginning of the vaccination campaign. Despite the efforts to decrease the burden, vaccine reluctance is increasing worldwide and hindering efforts to control the spread of COVID-19. For this, though higher official leaders trying to be the role model to take the vaccine. Studies conducted to identify the status of people's willingness to take the vaccine. For example, in total, 31.4% (n = 372) of respondents were willing to get a vaccine. One-third of respondents, 32.2% (n = 381), reported that COVID-19 vaccines are safe. Almost all 94.9% (n = 1124) responded that health workers should be vaccinated first. Only 21.7% (n = 257) willing to buy the vaccine if it is not provided free [11].

Case to Supports the Findings.

Case: Ethiopian Ministry of Education COVID-19 Response Plan and Practiced that adapt from research works of Belay Hagos and Wakgari Deressa [14, 15].

Schools in Ethiopia closed due to COVID-19 on 16 March 2020, following the declaration of the virus as a pandemic by the World Health Organization on 12 March 2020. The Ministry of Education of Ethiopia developed a 'Concept Note for Education Sector COVID-19 Preparedness and Response Plan' on 3 April 2020. Following the school closures and the response plan set by the Ministry of Education, the respective regional education bureaus have initiated the continuity of education using various media, including using educational radio programs and television learning programs provided by the Ministry of Education. In addition, some private schools, mostly in urban areas, have been focusing on engaging parents and their students in learning through a mobile application called Telegram, which is similar to WhatsApp but more widely used in Ethiopia. There are practical challenges in how distance-learning programs can accessed by students during such emergency contexts.

Technology Transformation: The government tried to used educational radio programs, educational satellite television programs (plasma TV), and using Telegram to act the COVID-19 situation above. However, limited access to devices available to the majority of the population particularly for disadvantaged groups: rural agrarian and pastoralist communities, economically disadvantaged segments of the society, persons with disabilities and students with non-literate families or first generation learners. Therefore, there is a very visible issue of inequity.

Providing a coordinated response: The various efforts of providing lessons to students in an emergency have been scattered and remain uncoordinated. The public and private schools' responses, across rural and urban areas, are varied in terms of how lessons are managed in the effort to prevent the spread of the virus. There is no strong taskforce that virtually meet and share good practices to generate efficient ways of facilitating learning process. Many students from private schools in Addis Ababa, for instance, are expected to follow their lessons with the help of technology (i.e. radio, TV, email, and/ or Telegram).

Monitoring engagement and learning: For the private, mainly urban, schools using methods such as Telegram to send out lessons, there seems to be less emphasis on monitoring whether students are engaging in the lessons and worksheets sent out. Similarly, many of the students from the public urban and rural schools are expected to follow the lessons from TVs and radios. Private schools have been defined a feedback loop where students work on various assignments and quizzes have been channeled individually to the right teacher for feedback. However, many public schools do not have such a monitoring mechanism. Devising a monitoring tool and providing feedback on students' engagement is a major pedagogical strategy for achieving desired results.

Inclusion of pre-school children: The lessons provided appear to overlook pre-school-aged children, especially those who enrolled in public primary schools. The good practices from some private schools could be emulated on how to address O-class and kindergarten children. However, parents need to be guided on how to stimulate, play and communicate with their kids in age-appropriate ways, so that they could at least be mature socio-emotionally and be protected from any forms of abuse and neglect. There is no a multiple media approach to learning including TV, radio, online and on paper for parents of pre-school children on how to interact, facilitate play, communicate and stimulate children's socio-emotional skills. No visits of families by community health workers.

Coping emotionally with the effects of a pandemic: Teachers, parents and students are vulnerable to the shock caused by the COVID-19 pandemic – managing and coping with fear, stress and anxiety is necessary. Parents and children need to be reassured that fear of COVID-19 is

normal and not seeing any danger in it is not normal. However, fear can turn out to be abnormal due to disturbances caused by the unknown. When people have the right information about COVID-19 and preventive measures from reliable sources, the fear serves as energy for seeking important coping strategies. There is no enough to deliver information to communities and parents – more active strategies to reach out to parents and communities are needed. Limited improvement of the Knowledge, Attitude and Practice (KAP) issues of COVID-19 among teachers, parents and students, the toolkit should not contain fundamentals of coping strategies with stress such as appraisal-focused coping strategies, adaptive behavioral coping strategies, emotion-focused coping strategies, reactive and proactive coping strategies, social coping and humor.

Question: What we learning during the pandemic about collaboration, resilience, and the ability of education systems to withstand shock of COVID-19?

4. Conclusion, Lessons Learned and Recommendation

4.1. Conclusion

4.1.1. Government Policy Decisions/Response and Communications

The level of awareness has been improved through time yet there is still a need to expand the means to reach the right and timely health information to the minorities and indigenous communities. Access to the main media such as TV giving the fact that they are living in the very remote areas where poor. Most of the policy measures and safety net programs were targeted the urban poor yet the rural poor where most of the minorities reside were left untouched. There is low levels of risk and impacts perception, the majority of the people have low perception of taking COVID-19 as a threat. Moreover, there are low educational status, rural residence, and low monthly income were significantly associated with poor knowledge and poor practice. The funds allocated to the health and social service for minorities were not clearly designated and never reported how much of the federal and regional governments were allocated for them.

Persons with Disabilities has been facing a wide range of survival problems as they depend on others for mobility. Thus, the policy failed to integrate the unique needs of Persons with Disabilities. There is a lack of transparency in the usage of the public finance of COVID-19 interventions. The daily number of tests and tests per capita are still low. Personal protective equipment must available, for not only health workers responding to COVID-19 but also those providing services in direct contact with patients. In general, there is the disruption of social services aggravated by the economic crisis affecting vulnerable households, may trigger fear and anger against frontline workers and authorities.

4.1.2. Roles and Accountabilities Across Different Levels of the Government System

The government of Ethiopia delegated the roles and responsibilities to the lower level of the governmental and non-governmental governance. The government has strongly obtained various measures like lockdown and a state of emergency. However, it was not strict and has not been heavy-handed that much. The cases and deaths are non-stoppable. For example, it is unclear responsibilities or decisions sit with local education officials, head teachers, teachers or parents in education sectors. One explanation for this lack of information might be that the country has a no structured system with a clear chain of command, embedded responsibilities and accountabilities.

4.1.3. Technology-measures Implemented and Improved for Social Service Delivery

Technology has significant role to be fast in delivering service with cost effective ways in terms of time and the situation of pandemic like COVID-19. Though the government doing things good, since June 2020, the number of identified COVID-19 cases has increased substantially in Ethiopia, due to both expansion of community transmission (as anticipated by epidemiological models), as well as significant improvements in testing capacity for detection. There were the limitation in terms of technology transformation. The national capacity of confirmatory testing has increased substantially across all regions and limited molecular laboratory capacity. Laboratory testing and clinical works were/are too limited in practical. The government also launched communication strategy.

The research found that governmental efforts have not been enough to reduce the spread of the virus. The government could not pay attention to high-risk and vulnerable groups to enhance their implementations. Education sector including higher education challenged by technological illiteracy, lack of technological capabilities and infrastructure. In addition, there are shortages of trained work force to imitate foreign technologies and subsequent innovative activities that helps to deliver the service during the incidences like COVID-19 virus. It is because of low level of scientific skills and low potentials to solve problems of industries. Here, the major question raise in the mind of policy researchers how to achieve national vision "to see Ethiopia become a country where democratic rule, good governance and social justice supremacy upon the involvement and freewill of its peoples, and once extricating itself from poverty becomes a middle-income economy?"

4.1.4. Adaptive and Evidence-informed Leadership Role Exercised

Different government layers responded different leadership measures to COVID-19. For this participatory leadership style put in place. The government design different leadership coordination path that includes regional state and structure, motivated individuals, stakeholders and leaders. However, the government faced and facing leadership challenges. These were/are:

A double burden due to the pandemic still challenging.

Weak health system and leadership, and public health emergencies are likely to increase social tensions,

Disruption of social services and aggravation of economic crisis because of lack of fast decision and leadership.

With the above challenges, Ethiopian higher officials goes to introducing COVID-19 vaccine. The introduction of vaccine launching at Addis Ababa, 13 March 2021 by the coordination of the Ministry of Health of Ethiopia launched COVID-19. However, studies indicated the status of people's willingness to take the vaccine in total, 31.4% (n = 372) of respondents were willing to get a vaccine.

4.2. Lessons Learned and Recommendation

Lessons and the way forwards were inculcated during this desk review. Since desk review is a process of review the previous research findings to gain a broad understanding of the field by collecting, organizing and synthesizing available information, the team gains an understanding of the country context about the practice of COVID-19 protection of Ethiopian government and stakeholders. Moreover, the desk review process provide lessons that important for better understanding the case as well as forward the concept useful for the staff and the stakeholders of the research department.

The policy response distinguish between two distinct but overlapping phases: response (or management of immediate health and economic shocks) and recovery. Response needs to focus on the obvious and immediate priority to save lives and livelihoods. The front-line policy measures for response are emergency support for overwhelmed health systems and for the millions of formal and informal sector workers, enterprises and businesses who are being hit hard. Its duration can vary but anywhere between the first 3-6 months from the outbreak of the pandemic. The second phase is recovery: it is essentially about return to trend as quickly as possible but doing so smartly, taking advantage of large-scale policy measures to tackle systemic risks and development shortfalls exposed by the pandemic rather than simply return to business-as-usual. A shift towards recovery can begin 3 months into the pandemic and could last anywhere between 12-18 months from the outbreak of the pandemic. Therefore, the government intervene based on the above policy intervention phase.

With great efforts of leadership response and policy, stance small percent of the population are willing to take the COVID-19 vaccine and most people were hesitating about vaccine safety and effectiveness. For this finding government tailored education messages for the entire population to emphasize the safety and effectiveness of the COVID-19 vaccine, address the concerns of side effects of general vaccines by dispelling misconceptions, and target the most vulnerable subgroups who reported a high level of risk exposures while showed low intention to take the vaccine. To adapt and adopt the vaccine effectively and effectively the government of Ethiopia and ministry of health in particular should addressing the information gaps of the society through action research and training.

In addition, the findings above indicated that education sector is the most vulnerable because of COVID-19 even more than economic impacts. Therefore, government of Ethiopia and ministry of Education in specific should support the following areas:

Training on skills and technologies that promote quality education.

Technical support to allow teachers to spend more time on teaching versus and navigating the technology.

Ensuring availability of relevant teaching and learning content that helps to protect the versus.

Systematic training on how to conduct online education including formal teaching and learning process.

Preparing for and enacting the transition back to school of school communities.

Make ready the school community for the transition from online learning to classrooms through implementing the national health and safety guidelines continuously.

Psychological support to students.

A number of sources state that though a national monitoring and evaluation team has been put in place to understand how effective online learning methods there are gaps that should be consider. Therefore, the government with the help of other civic organizations should make active the process of monitoring and evaluation process through regular check. Explicitly focus on the most vulnerable groups/remote areas - including the learning and psychosocial needs of disadvantaged students.

The finding also indicated that social, economic and political status of the country were/are frustrated/frustrating because of COVID-19. It is because of technological incapability and lack of technology infrastructure. Therefore, policymakers and implementers need to consider how to run the major goals of the country during the incidence like COVID-19.

References

[1] World Bank. (2020). Acting Early, Fast and Together: Mobilizing Efforts to Prepare and Respond to the COVID-19 Pandemic in Ethiopia.

[2] WHO. (2021). Ethiopia introduces COVID-19 vaccine in a national launching ceremony.

[3] Davis, K. (2020). Ethiopia delays elections: Is COVID a valid excuse?

[4] UN. (2020). SOCIO –ECONOMIC IMPACT of COVID-19 in ETHIOPIA.

[5] NMOH. (2020). NATIONAL COMPREHENSIVE COVID-19 MANAGEMENT HANDBOOK.

[6] Tadesse Anberbir. (2015). Survey of the Use e-Learning in Higher Education in Ethiopia. Addis Ababa Science & Technology University (AASTU).

[7] Ministry of Education. (2018). Education Development Roadmap. Addis Ababa.

[8] Kebede, A. (2020). COVID-19 in Ethiopia: status and responses.

[9] Mekonen, H. (2020). COVID-19 in Ethiopia: Assessment of How the Ethiopian Government has Executed Administrative Actions and Managed Risk Communications and Community Engagement.

[10] UNICEF. (2020). Novel Coronavirus (COVID-19): Situation Report No. 11.

[11] Kiruga, M. (2020). Ethiopia: Indefinite postponement of polls raising political tempers.

[12] Yitayeh, B., Yibeltal, Y., Yonas, A. (2021). Willingness of Ethiopian Population to Receive COVID-19 Vaccine. Journal of Multidisciplinary Healthcare.

[13] Adugna, A. (2020). Establishment of COVID-19 testing laboratory in resource-limited settings: challenges and prospects reported from Ethiopia.

[14] Belay Hagos. (2020). Education Response to COVID-19: How Can Basic Education be implemented in Ethiopia?

[15] Wakgari Deressa (2020). Knowledge and perceptions of COVID-19 among government employees in Ethiopia.