Advances
in
Bioresearch

TECHNICAL REPORT

COVID-19 in Ethiopia: Recommendations based on lesson learned from china

Tinsae Kebede[1], Dharmendra Kumar[2*], Pramod Kumar Sharma[2]

[1] Department of Veterinary Medicine, College of Veterinary Medicine, Haramaya University, Haramaya, Ethiopia. ORCID: 0000-0003-0956-3427
Phone: +251915617376, Email: tinsaekebede55@gmail.com
[2]Department of Pharmacy, Galgotias University, G.B Nagar India ORCID of Dharmendra Kumar: 0000-0003-1204-2382
Author for correspondence's E mail: rvnimiet@gmail.com

ABSTRACT

After the first occurrence of coronavirus disease 2019 in China, it started to spread to other countries and different countries reported existence of imported confirmed cases of COVID-19 in their countries. Recently the number of infected peoples is increasing exponentially from day to days. On a month of 13 March, 2020, Ethiopia, located in East Africa, confirmed first imported case of COVID-19. The aim of this letter is to describe the current scenario of COVID-19 pandemic in Ethiopia and forwards recommendations including obligatory quarantine for exposed individuals, social distancing, increasing capacity of testing, suspending sporting, cultural, religious and leisure events that gather high number of peoples, avoiding meetings with more peoples rather facilitating teleworking and video meetings, creating awareness on communities to avoid trips inside and outside countries, limiting visits to hospitals, isolation of areas or districts that have high number of cases, and formulating partial lock-down models based on status of the country to further prevent spread of the disease. This letter also recommends other prevention and control methods that are already in position to further strengthen prevention of this pandemic disease.
Keywords: COVID-19, Ethiopia, China, Recommendations

How to cite this article:
T Kebede, D Kumar, P K Sharma. COVID-19 in Ethiopia: Recommendations based on lesson learned from china. Adv. Biores., Vol 11 (3) May 2020: 15-17

On 30 January, 2020, Coronavirus disease (COVID-19) was declared as public health emergency of international concern (PHEIC) and then on March 11, 2020, declared a global pandemic by world health organization [1]. These declarations were due to the rapid increase of confirmed cases of COVID-19 to all parts of world. Still the numbers of infected peoples are continuously rising in around two hundred ten (210) countries [2]. As of today April 29,2020, SARS-CoV-2 infected 3,146,651 peoples and caused death of 218,178 peoples globally. At the same time 961,833 patients recovered from this pandemic disease after getting medical aid. High number of death were reported from USA (59,266), Italy (27,359) Spain (23,822), France (23,660) UK (21,678) in descending order [2,3]. These reports show the disease is causing devastating impact even in countries that have an advanced health systems like USA, Italy, Spain, France and so forth [4]. The disease is reported to world health organization from around 210 countries including from developing and low income countries of Africa [5]. As a result we are intensely worried about the influence of the disease in these low income countries. Although developed countries are incapable to control the disease and still many peoples are losing their lives [6-8].
Still low income countries in Africa are also challenging with high prevalence of HIV [9], Non communicable diseases (Chronic) [10] and malnutrition [11]. We believe that it is the time to report the COVID-19 situation in Ethiopia and forwarded recommendations based on lessons learned from china and other countries that controlled this pandemic disease. Federal Democratic Republic of Ethiopia's Minister of Heath, Dr. LiaTadesse, reported the first imported case of COVID-19 on 13 March, 2020 [12]. The first victim of this pandemic disease in Ethiopia is a Japanese citizen came to Ethiopia for

humanitarian aid [13]. Then three (3) confirmed cases was reported (1 Ethiopian and 2 Japanese citizens) on March 15, 2020 [13]. These infected individuals had contact history with the first reported Japanese citizen. On 16 March, 2020, one Ethiopian traveler from Dubai was tested positive [13]. Then cases was increasing from day to days, as of April 29,2020 , a total of 126 infected persons and 3 deaths was reported by Ethiopian Minister of Health.

This letter is a wake-up call to Ethiopian government about COVID-19 that are infecting millions of global citizens without any prejudice as to their race, economy, education, ethnicity, religion, gender, age, and other factors. As a result the world should unite to fight this pandemic disease.

Recently the number of imported confirmed cases is rising although conducting few numbers of testing's per day. As a result it may lead to death of many peoples and cause huge burden on public health system of the country. Therefore we recommend the following measures to further strength prevention and control of this dangerous pandemic disease.

1. The government of Ethiopia should implement strict measures in increasing testing numbers per day, diagnosis and management including Quarantine for travelers coming from other countries for at least for 14 days. Furthermore their luggage and shoes of travelers should be disinfected before releasing after 14 days of quarantine.
2. The government should prepare important facilities including diagnostic kits, other personal protective equipment's (PPE), and resources needed for quarantine and isolation. Since the above mentioned strategies helped china to reduce COVID-19 new cases appearing each day from 1600 to none [14].
3. The government of Ethiopia should implement massive disinfection campaign. Still this campaign is implemented in the capital Addis Ababa and other few cities. So, this massive disinfection campaign should be continued and also performed in other zonal towns, different districts and so forth.
4. The Federal government of Ethiopia should support other health centers and laboratories found in the nine regional states and two town administrations rather depending on only Ethiopian public health institute (EPHI) and other hospitals found in the capital city Addis Ababa. In addition to these since the positive cases are rising and accumulating, some of the existing malls, halls (Including millennium halls) , schools, stadiums, hotels, and exhibition centers should be arranged as temporary hospitals to receive COVID-19 patients. Establishing another safe rooms which contain important equipment's (Example: Ventilators) for severely affected patients
5. Ethiopian Ministry of Health should provide/create awareness towards the travelers coming from other countries through health care practitioners. Health care practitioners should inform travelers to report if they came across different symptoms such as dry coughing, fever, shortness of breath and so forth.
6. Recently we are observing a lot of fake news posted on Social Medias in Ethiopia. As a result of this, peoples are trusting fake news's and using recommendations forwarded from Social Medias. Example: Some of Ethiopians are using traditional medicines (locally known as "Feto", "Zinjibil", "Nechshinkurt", "Areke", "Lomi", "Mar", "Tenaadam") as a treatment of corona disease (COVID-19). Therefore we recommend that citizens of Ethiopia should avoid accepting recommendations from unknown and unreliable sources. They should only take information from trusted and reliable sources such as Ethiopian Public Health Institute, Ministry of Health, and WHO.
7. This letter calls up on the government of Ethiopia to ban all kinds of cultural, religious, and public gatherings. Till now peoples are not practicing and undertaking social distances properly. For example: In Shalla district, West Arsi Zone, Ethiopia, peoples are not protecting themselves from this pandemic disease still now hand shaking and public gatherings are common practice and not avoided. However, different volunteer individuals such as Tigist Gemechu, Kufa Gadiso, Gemmedo Rabo, Gemechu Edao and others are undertaking awareness creation programs in the district. They are providing sanitizers to passengers entering a bus as a precaution against the spread of new coronavirus in the administrative center of shalla district, Aje town. This practice of volunteers should be supported and facilitated by the districts administration. As we remember China banned public gatherings on 25 January, 2020 [15]. This strategy helped china to control the disease. So, Ethiopia should followchina's model of eradication of this invisible enemy, pandemic disease.
8. Still peoples in Ethiopia are using bank notes in banks. We advise the ministry of finance of Ethiopia to create awareness programs towards using of contactless payment platforms including mobile applications and electronic bank transactions by ensuring ease of its use, security and privacy. This suggestion also forwarded by WHO [16]. Bankers should inform

customers to wash their hand after handling moneys. According to study conducted to assess microorganisms harbored by banknotes on 2017 [17], different bacteria's, viruses and drugs was isolated from bank notes.

9. As we know china and other countries imposed lockdown for varied number of days as a response to COVID-19 outbreak. However imposing of lockdown in low income countries like Ethiopia may not suitable. So the government of Ethiopia should implement/formulate strategies other than lockdown that didn't affect daily lives of citizens. This is because most of Ethiopians has to work daily to earn living.
10. The Federal government of Ethiopia should formulate networking and partnership with other developed countries such as Chinese doctors and health practitioners to share their experience and information on timely diagnosis, testing efficiency, supportive therapy including Chinese traditional medicine to control this disease. Though Integration and interdisciplinary synergies will help in controlling of this recent pandemic disease.

CONFLICT OF INTEREST
All authors declare that there are no any kinds of conflicts of interest.

ACKNOWLEDGEMENT

REFERENCES
1. World Health Organization declares COVID-19 a 'pandemic.' Here's what that means. https://time.com /5791661/who-coronavirus-pandemic declaration/. Accessed on 28 April 2020.
2. World Health Organization. 2020. Novel Coronavirus (2019 n-CoV) situation reports. https://www.who.int /emergencies/diseases/novel-coronavirus-2019/situation reports/Accessed on April 27, 2020.
3. The spread of coronavirus outside China. https://www.statista.com/chart/2 0935/covid-19-coronavirus-cases-outside-china/. Accessed 28 April, 2020.
4. WHO. Director-General's opening remarks at the media briefing on COVID-19. https:// www.who.int /dg/speeches/detail/ who-director-general-sopening-remarks-at-the-media briefing-on-covid-19%2D%2D-11-march-2020. Accessed 28 April 2020.
5. Updated WHO advice for international traffic in relation to the outbreak of the novel coronavirus 2019-nCoV. https://www.who.int/news-room/articles detail/updated-who-advice-for-international-traffic-in-relation-to-theoutbreak-of-the-novel-coronavirus-2019-ncov-24-jan/. Accessed 28 April 2020.
6. Malik Y, Sircara S, Bhata S, Sharunb K, Dhamac K, Dadard M, et al.. Emerging novel coronavirus (2019-nCoV)-Current Scenario, Evolutionary perspective based on genome analysis and recent developments. Veterinary Quarterly 2020; 40 (1): 68-76.
7. Azamfrei R. The 2019 Novel Coronavirus: A Crown Jewel of Pandemics? J Crit Care Med (TarguMures). 2020; 6(1): 3-4. https://doi.org/10.2478/jccm-2020- 0013
8. Kumar D, Malviya R, Kumar Sharma P. Corona Virus: A Review of COVID-19. EJMO 2020;4(1):8–25.
9. WHO. (2020). HIV Key Facts. https://www.who.int/news-room/fact-sheets/detail/hivaids. .
10. WHO. (2020). Major Non-communicable diseases and their risk factors. https:// www.who.int/ ncds/introduction/en/.
11. Gebre A, Reddy SP, Mulugeta A, Sedik Y, Kahhsay M. (2019). Prevalence of malnutrition and associated factors among under-five children in pastoral communities of afar regional state, Northeast Ethiopia: a community-based cross-sectional study. J NutrMetabol. 918-920
12. Ethiopia confirms first coronavirus case: Live updates. Alzazeera.com.Archived on the march 13, 2020.
13. Coronavirus: 3 New cases identified in Ethiopia. *ethiopianmonitor.com*. Accessed on April 28, 2020.
14. How does quarantine actually work? https://www.weforum.org/agenda/2020/03/coronavirus-covid-19-quarantine-restrictions/. Accessed 27 April 2020.
15. What China's coronavirus response can teach the rest of the world. https:// www.nature.com/articles/d41586-020-00741-x. Accessed 27 April 2020.
16. WHO. Encourages use of contactless payments due to Covid-19. https:// www.forbes.com/sites/rogerhuang /2020/03/09/ who-encourages-use-ofdigital-payments-due-to-covid-19/#61b7f19641eb. Accessed 27 April 2020.
17. Dirty Money. (2020) .https://edition.cnn.com/2017/06/26/health/atm-dirty-cashpartner/index.html.