



# 14<sup>th</sup> APRIL 2020 (For April 13 and 14)

# UPDATE ON GLOBAL, REGIONAL AND NATIONAL DEVELOPMENTS ON COVID-19

THE KNOWLEDGE SYNTHESIS TEAM

CDT-AFRICA, ADDIS ABABA UNIVERSITY

www.cdt-africa.org

## **Summary**

- Globally almost two million people (1,938,863) are infected with coronavirus causing 120, 871 deaths and 459,427 recoveries as of April 14, 12:00 GMT.
- USA accounting for more than 30% (587,173 cases) of the total cases in the world with New York being the most affected state.
- Africa confirmed number of 16,027 cases, 838 deaths, and 2,283 recoveries as of April 14, 2:00 PM EAT. South Africa has the highest number of cases but with low death rate when compared with other African countries (and even many highincome countries)
- In Ethiopia, currently there are 82 cases, 3 deaths and 14 recoveries.
- A large-scale antibody testing underway in the US
- Researchers warned that the use of high doses chloroquine for any COVID-19 patients due to a finding that the drug may bring about heart problems.
- Clinicians at Sweden Hospitals have received guidance not to use chloroquine to treat COVID-19 patients outside of clinical trials because of its serious side effects.
- The EU regulator and WHO indicate that the science doesn't support the use of chloroquine and hydroxychloroquine, but US and French authorities have authorized to use it.
- It was stated that economic stress, social isolation, decrease access to community and religious support as well as barriers to mental health treatment are potential risks for suicide.

#### Recommendations

- The pandemic is continuing without clear sign of abating. Need to continue the current posture of extreme vigilance, prevention and control measures.
- Access to a reliable antibody test needs to be prioritised, if possible with technology transfer opportunities
- There are strong and rational concerns about high dose chloroquine. Carefully conducted clinical trials are needed in the absence of good data coming from elsewhere
- There is still a need for good alternative treatment options
- The usual concerns about masks continue. Nevertheless, there is an ongoing need to urge the public to employ the proven control measures (distancing and hygiene). There is also a need to regularly inform the public to use face coverings properly. Demonstration videos may be helpful, if not already available

- Ongoing monitoring of mental wellbeing of people is needed. For this reason, will be helpful to establish a large cohort to be monitored by phone on a regular basis to evaluate changes in their mental wellbeing as well as their resilience and coping
- Emphasis on physical NOT social distancing in public education. Maintaining ongoing contact with at least few trusted friends/families. People who have separated from their family and friends through migration could be at increased risk.

# Update on Epidemiology (Incidence, mortality, recovery & epidemiologic parameters)

#### Global

- Approximately, two million people (1,938,863) are infected with coronavirus worldwide causing 120, 871 deaths and 459,427recoveries as of April 14, 12:00 GMT.
- The total number of new cases reported in the last 24 hours (71,572 new cases) is slightly lower than report the previous day (72,523). Unclear if this is a trend. Fluctuations have been observed previously. The number of new deaths (5,421) is similar with that of April 12th report (5,417).
- More than 30% (587,173 cases) of the total cases in the world were reported from the United States of America (USA) and the total number of deaths in the country also increased to 23,644 as of April 14, 12:00 GMT.
- New York is the most affected state with 195,655 cases and 10,056 deaths followed by New Jersey (64,584 cases, 2,443 deaths) and Massachusetts (26,867 cases, 844 deaths).
- The other countries reporting high number of cases remain unchanged: Spain is the second most affected country with a total of 172,541 cases and 18,056 deaths followed by Italy (159,516 cases, 20,465 deaths), France (136,779 cases, 14,967 deaths) and Germany (130,072 cases, 3,194 deaths).
- About three quarters [88,438 (73.5%)] of the total deaths in the world were still reported from the USA (23,644), Italy (20,465), Spain (18,056), France (14,967) and United Kingdom (11,329).

#### **Africa**

 COVID-19 is reported in 52 member states of Africa with a total number of 16,027 confirmed cases, 838 deaths, and 2,283 recoveries as of April 14, 2:00 PM EAT.

- Even though, South Africa is still the leading country with a total of 2,272 cases in the continent, the number of deaths remained very low (27). But there is a trend of slow increase with the increase in the number of cases. This may partly be a reflection on the care burden. Further increase in cases may lead to increase in deaths.
- Egypt has now become the second most affected country with a total of 2,190 cases and 164 deaths followed by Algeria (1,983), Morocco (1,838) and Cameroon (848).
- Comparing the last two days' report, the number of new cases is slightly reduced in South Africa (145 to 99), Algeria (89 to 69) and Morocco (116 to 102) whereas equal number of new cases were reported in Egypt (126 to 125). In Cameroon, 28 new cases were reported on April 13th while no additional cases were identified on April 12th.
- The highest number of deaths occurred in Algeria (313; 15.78%) which accounted for 37% of the total deaths in the continent.
- Egypt (164), Morocco (126) and Tunisia (34) are other African countries with high number of deaths according to Worldometer daily update.

#### **Ethiopia**

- In Ethiopia, additional 694 laboratory tests were performed within the last 48 hours and eleven of them confirmed to be positive for COVID-19 raising the total number of cases to 82.
- Out of the total additional cases, majority (8/11) of them were males and Ethiopians while the rest three have Eretria, Somali and United Kingdom citizenship.
- Seven of the additional cases don't have travel history to abroad and out of this, only four of them confirmed having contact history with COVID-19 cases suggesting community transmission of the virus in the country.
- According to the ministry of health report, additional four people recovered from the virus on April 13th making the total number of recoveries 14. Therefore, currently there are 82 cases, 3 deaths and 14 recoveries as of April 14, 3:00 PM EAT.

# **Update on Diagnosis**

- According to FIND diagnostics, as of 14th April 2020 [09:45am, East Africa time], there are 218 molecular assay tests commercialized and 40 tests under development for COVID-19. Also, there are, 197 immunoassay tests commercialized and 46 tests under development (FIND, 2020).
- The University of Southern California's Price School of Public Policy Department is conducting large scale antibody testing in California. The researchers said the

findings could help shape strategies to get the U.S. economy going again (McLaughlin and Blankstein, 2020).

### **Update on Treatment**

# Safety concerns over the use of chloroquine for COVID 19 patients

- A Brazilian study testing the antimalarial drug chloroquine for COVID-19 had to be stopped early in one group of patients taking a high dose of the drug, after some patients in this group developed dangerous heart rhythm problems. The Brazilian researchers planned to enrol 440 people in their study to test whether chloroquine is a safe and effective treatment for COVID-19. Participants took either a "high dose" of the drug (600 milligrams twice daily for 10 days) or a "low dose" (450 mg for five days, with a double dose only on the first day). All patients also received the antibiotics ceftriaxone and azithromycin as part of their treatment. The study was double blind clinical trial. However, after enrolling just 81 patients, the researchers saw some concerning signs. Within a few days of starting the treatment, more patients in the high dose group experienced heart rhythm problems than did those in the low dose group. And two patients in the high dose group developed a fast, abnormal heart rate known as ventricular tachycardia before they died. As a result of the findings, the researchers immediately halted the high-dose arm of the study. They warned against using such high doses for any COVID-19 patients (Rachael Rettner, 2020, Jacqueline Howard, 2020, Borba et al., 2020).
- Hospitals in Sweden have received guidance directing clinicians not to use chloroquine to treat COVID-19 patients outside of clinical trials. the guidance states that "considering the very low evidence of any significant effect on COVID-19 and since serious side effects can't be ruled out, the use of chloroquine outside of clinical trials is not recommended. "Similarly, Last week, the American Heart Association, the American College of Cardiology and the Heart Rhythm Society issued guidance about critical cardiovascular considerations for the use of hydroxychloroquine and azithromycin to treat the novel coronavirus, saying doctors must consider "potential serious implications for people with existing cardiovascular disease." (Jacqueline Howard, 2020)
- At the level of regulatory authorities there appears to be a split over the use of these anti-malarial medications. While US and French authorities have authorized the use of chloroquine and hydroxychloroquine, but the EU regulator and WHO say the science doesn't support the decision (Jaffe, 2020).

### Update on personal protective equipment

#### Face mask use

The topic of wearing face mask by the public is still one of the controversial topics during this COVID-19 pandemic. An article published on the National Post presented the recommendations about wearing face masks outdoors. It also states there is still so much unknown about COVID-19: exactly how it spreads, how much of it is needed to infect, how long it remains infectious on surfaces or in the air. It was noted the people who require masks the most are struggling to find it, exactly because the demand for masks has outpaced limited supplies(Marsh, 2020)

# Psychosocial wellbeing of health professionals during COVID 19 outbreak

There are concerns that the social distancing measures combined with other socio-economic challenges arising from COVID-19 may increase the risk of suicide (Reger et al 2020). The opinion in this JAMA psychiatry publication advocates for emphasis on physical, NOT social, distancing. It also advocates for creating opportunities to increase access to mental healthcare. For example, through tele-mental health, telephone-based outreach. On the other hand, the authors also note that suicide rate in previous national disasters had decreased ("Pulling together effect"). No clear data on pandemics. pointed about the risk of suicide during this pandemic---thus no guarantee that risk of suicide won't increase. The authors also emphasised that health professionals are already vulnerable group (Dutheil et al, 2020) and can be considered as risk population that need serious attention.

#### Reference list

- African Union; COVID -19 updates. https://au.int/en/covid19
- Borba, M., Val, F. D. A., Sampaio, V. S., Alexandre, M. A., Melo, G. C., Brito, M., Mourao, M., Brito Sousa, J. D., Baia-Da-Silva, D., Guerra, M. V. F., Hajjar, L., Pinto, R. C., Balieiro, A., Naveca, F. G., Xavier, M., Salomao, A., Siqueira, A., Schwarzbolt, A., Croda, J. H. R., Nogueira, M. L., Romero, G., Bassat, Q., Fontes, C. J., Albuquerque, B., Daniel-Ribeiro, C., Monteiro, W. & Lacerda, M. 2020. Chloroquine diphosphate in two different dosages as adjunctive therapy of hospitalized patients with severe respiratory syndrome in the context of coronavirus (SARS-CoV-2) infection: Preliminary safety results of a randomized, double-blinded, phase IIb clinical trial (CloroCovid-19 Study). medRxiv, 2020.04.07.20056424.
- Center of Disease Control and Prevention Africa <a href="https://africacdc.org/covid-19-update/">https://africacdc.org/covid-19-update/</a>
- Dutheil F, Aubert C, Pereira B, Dambrun M, Moustafa F, Mermillod M, et al. Suicide among physicians and health-care workers: A systematic review and meta-analysis.
   PLoS one. 2019;14(12).
- Ethiopian Public Health Institute CoronaVirus Update;
   <a href="https://www.ephi.gov.et/index.php/public-health-emergency/novel-corona-virus-update">https://www.ephi.gov.et/index.php/public-health-emergency/novel-corona-virus-update</a>
- FIND. 2020. SARS-COV-2 DIAGNOSTIC PIPELINE [Online]. Available:
   <a href="https://www.finddx.org/covid-19/pipeline/">https://www.finddx.org/covid-19/pipeline/</a> [Accessed 14 April 2020].
- Jacqueline Howard, E. C., Nadia Kounang and Per Nyberg, . 2020. Heart risk concerns mount around use of chloroquine and hydroxychloroquine for Covid-19 treatment. CNN 14 April 2020.
  <a href="https://edition.cnn.com/2020/04/13/health/chloroquine-risks-coronavirus-treatment-trials-study/index.html">https://edition.cnn.com/2020/04/13/health/chloroquine-risks-coronavirus-treatment-trials-study/index.html</a>
- JAFFE, S. 2020. Regulators split on antimalarials for COVID-19. The Lancet, 395, 1179.
- John Hopkins, Corona Virus Resources https://coronavirus.jhu.edu/map.html
- MARSH, C. 2020. The face mask has become COVID-19's most unlikely controversy.
   National Post, 13 April 2020.

- MCLAUGHLIN, E. & BLANKSTEIN, A. 2020. Large-scale COVID-19 antibody testing study launched in California [Online]. Available:
   <a href="https://www.nbcnews.com/health/health-news/los-angeles-county-launches-large-scale-covid-19-antibody-study-n1182031">https://www.nbcnews.com/health/health-news/los-angeles-county-launches-large-scale-covid-19-antibody-study-n1182031</a> [Accessed 14 April 2020].
- RACHAEL RETTNER. 2020. Trial of chloroquine to treat COVID-19 stopped early due to heart complications. Live science, 13 April 2020.
   <a href="https://www.livescience.com/coronavirus-chloroquine-study-stopped-early.html">https://www.livescience.com/coronavirus-chloroquine-study-stopped-early.html</a>
- Reger MA, Stanley IH, Joiner TE. Suicide Mortality and Coronavirus Disease 2019—
   A Perfect Storm? JAMA Psychiatry.
- Worldometer, Corona Virus https://www.worldometers.info/coronavirus/