



Update: 27-29 June, 2020

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

THE KNOWLEDGE SYNTHESIS TEAM
CDT-AFRICA, ADDIS ABABA UNIVERSITY
www.cdt-africa.org

Summary

- As of June 29, 13:00 GMT, worldwide, more than ten million (10,280,397) people are now infected with coronavirus with 505,145 deaths and 5,580,959 recoveries.
- As of June 29th, 4:00 PM EAT, a total of 382,652 cases 9,657 deaths and 182,569 recoveries from COVID-19 were reported in Africa.
- While most children with COVID-19 have mild illness, a study done across 25 European countries indicated that a small proportion of children develop severe disease requiring ICU admission and prolonged ventilation.
- A new study has also reported neurological complications of COVID-19 cases. The broad clinical syndrome includes cerebrovascular events, altered mental status and peripheral neurological problems.
- A study done on face mask use showed 63.8% of participants said that they wore and removed their masks several times because of work. Masks were usually found to be placed in bags (60%), jacket pockets (17%), pants pockets, (15%), and desk surfaces (8%).
- Health professionals working in extended shift experience fatigue, psychological distress, treatment errors and reduced performance.

Recommendations

 Given the accumulating evidence regarding the potential impact of COVID-19 on some children, careful monitoring of children with COVID-19 is required. Local evidence is also needed

Update on pathogenesis

- A multinational cohort study was done across 25 European countries with the aim of identifying factors associated with need for intensive care unit (ICU) admission for COVID-19 among pediatric age groups. The study included 582 children with PCR-confirmed SARS-CoV-2 and the main findings include;
 - > 363 (62%) of children were admitted to hospital and 48 (8%) required ICU admission.
 - ➤ 25 (4%) required mechanical ventilation, 19 (3%) inotropic support, and one (<1%) extracorporeal membrane oxygenation.
 - ➤ At the end of the follow up, four children died with case-fatality rate of 0.69%.

- ➤ Factors associated with ICU admission are being younger than 1 month (OR-5·1, 95% CI 1·7–14·9), male sex (OR- 2·1, 1·1- 4·2), pre-existing medical conditions (OR- 3·3, 1·7- 6·4), and presence of lower respiratory tract infection signs or symptoms at presentation (OR- 10·5, 5·2- 21·2)
- ➤ Generally, COVID-19 is a mild disease in children but this study indicated that a small proportion of children develop severe disease requiring ICU admission and prolonged ventilation [Götzinger, F. 2020].
- Few studies highlighted that COVID-19 might result in neurological complications but there was no compelling evidence on this area. Recently, a trans institutional study was conducted between Association of British Neurologists (ABN), the British Association of Stroke Physicians (BASP), and the Royal College of Psychiatrists (RCPsych). Physicians across UK were encouraged to report Neurological and neuropsychiatric cases prospectively through the online notification portals from April 2 to 26, 2020. The broad clinical syndrome included cerebrovascular events, altered mental status and peripheral neuropathy. A total of 153 cases were identified during the stated time period and complete clinical datasets were available for 125 patients. The study reported that;
 - > 77 (62%) of the patients presented with a cerebrovascular event, of whom 57 (74%) had an ischemic stroke, 9 (12%) an intracerebral hemorrhage, and 1 (1%) CNS vacuities.
 - ➤ 39 (31%) patients presented with altered mental status. Of this, 9(23%) with unspecified encephalopathy, 7(18%) with encephalitis and more than half 23 (59%) of these patients with psychiatric diagnoses (21 of them were new diagnoses).
 - ➤ Ten (43%) of 23 patients with neuropsychiatric disorders had new-onset psychosis, 6 (26%) had a neurocognitive (dementia-like) syndrome, and 4 (17%) had an affective disorder [Varatharaj, A., 2020].

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

Global

- Worldwide, more than ten million (10,280,397) people are infected with coronavirus causing 505,145 deaths and 5,580,959 recoveries as of June 29, 13:00 GMT.
- Out of the total active cases, 4,136,810 (99%) of them are mild cases and only 57,483 (1%) are in critical or serious condition.
- On June 26th, additional 194, 190 cases were reported globally which is the highest number of new cases recorded since the pandemic started.

- Consistently, United States of America (USA) continues to be the leading country with both high number of cases and deaths in the world. As of June 29th, 13:00 GMT, more than 2.6 million (2,637,439) people were infected with the virus and 128,443 deaths were reported in the country which accounted for equal proportion (26.0 %) of total cases and deaths in the world.
- New York (416,787 cases), California (216,089 cases) and New Jersey (176,354 cases) are the three most affected states in US accounting for 30.7% of total cases in the country.
- Other countries with high number of COVID-19 include Brazil (1,345,470), Russia (641,156), India (550,395) and United Kingdom (311,151).
- Brazil is also the second country with highest number of deaths (57,659 deaths) followed by United Kingdom (43,550 deaths), Italy (34,738), France (29,778 deaths) and Spain (28,343 deaths).

Africa

- As of June 29th, 4:00 PM EAT, a total of 382,652 cases 9,657 deaths and 182,569 recoveries from COVID-19 were reported in Africa.
- The number of cases in South Africa was nearly 140,000 (138,134 cases) which accounted for more than one third (36.1%) of total cases reported in the continent. Based on Worldometer report, the number of new cases in the country is persistently increasing and on June 27th, the highest number of new cases (7,210) were reported in the country.
- Similarly, the number of new cases in Egypt is continuously increasing and until now, a total
 of 65,188 cases are reported in the country contributing for 17.0 % of total cases in Africa.
- Egypt is also the leading country with high number of deaths in the continent and as of June 29th 4:00 EAT, a total of 2,789 people have died in the country.
- Other African countries with high number of COVID-19 cases and deaths include; Nigeria (24,567 cases and 565 deaths), Ghana (17,351 cases and 112 deaths), Algeria (13,273 cases and 897 deaths) and Cameroon (12,592 cases and 313 deaths).

Ethiopia

- According to the Ministry of Health report, a total of 13,140 laboratory tests were carried out in the past three days and 421 additional COVID-19 cases were identified in the country.
- Four hundred seventeen (417) of these cases are Ethiopians while the rest 4 are citizen of other countries. The age of the additional cases ranges from 2 months to 90 years and 256 (60.8%) of them are males.
- More than three fourth 325 (77.2 %) of these cases were reported from Addis Ababa, 28 from Oromia, 11 from Dire Dawa, 16 from Amhara, 17 from Somali, 5 from Afar, 8 from Tigray, 4 from Benshangul Gumuz and 7 from Hareri region.

- The ministry also reported that additional 742 people (595 from Addis Ababa, 87 from Somali, 36 from Tigray, 17 from Amhara, 2 from Oromia, and 1 from Dire Dawa) are fully recovered from the disease raising the total number of recoveries to 2,430.
- In addition, fourteen people (10 males and 4 females) have passed away in the last three days raising the total number of deaths in the country to 103.
- Therefore, a total of 250,604 laboratory tests were conducted and 5,846 confirmed cases, 103 deaths and 2,430 recoveries were reported as of June 29th, 6:00 PM EAT.
- Out of the total 3,311 active cases, 35 of them are in critical condition and receiving treatment in the intensive care unit, while the others are having mild form of the disease.

Update on personal protective equipment

Face mask use

A survey done on 160 university students residing in Taiwan showed the average total use time of mask was 5.306 hours in a day. 63.8% of respondents said that they wore and removed their masks several times because of work. Masks were usually found to be placed in bags (60%), jacket pockets (17%), pants pockets, (15%), and desk surfaces (8%). The average inconvenience of mask inhalation was high indicating that the smoothness of breathing is troublesome. Contact spread experiment was also conducted and the results showed that the contaminated area varies considerably from user to user. The average polluted area of the ten subjects was 530 cm2. The authors noted that hand contact is one of the transmission paths; when the hand touches the surface of the mask, it may spread the virus to the subsequent contact area, which is worthy of attention for general users(Chao, 2020).

Psychosocial wellbeing updates

A commentary on a study from Singapore reported the impact of regular versus extended shift on wellbeing in the emergency department health workers. The regular shift was 8-9 hours and the extended shift was 12 hours. The study evaluated the impact of working in the extended shift in the Emergency department. They found that those working in the extended sift experience fatigue psychological distress, treatment errors and reduced performance. In addition, there is high risk of cross exposure among staffs working in

different sections of the department. Though, health workers schedule (roster) will definitely depend on the size of the health facility and number of staff, it is important to remember the impact of the schedule on wellbeing (Pothiawala et al., 2020).

Reference list

- African Union; COVID -19 updates. https://au.int/en/covid19
- BRAQUEHAIS, M. D., VARGAS-CÁCERES, S., GÓMEZ-DURÁN, E., NIEVA, G., VALERO, S., CASAS, M. & BRUGUERA, E. 2020. The impact of the COVID-19 pandemic on the mental health of healthcare professionals. QJM: An International Journal of Medicine.
- Center of Disease Control and Prevention Africa https://africacdc.org/covid-19-update/
- CHAO, F.-L. 2020. Adolescents' face mask usage and contact transmission in novel Coronavirus. Journal of Public Health Research,
- Ethiopian Public Health Institute CoronaVirus Update;
 https://www.ephi.gov.et/index.php/public-health-emergency/novel-corona-virus-update
- Götzinger, F., Santiago-García, B., Noguera-Julián, A., Lanaspa, M., Lancella, L., Calò Carducci, F. I., Riordan, A. (2020). COVID-19 in children and adolescents in Europe: a multinational, multicentre cohort study. The Lancet Child & Adolescent Health. doi: 10.1016/s2352-4642(20)30177-2
- John Hopkins, Corona Virus Resources https://coronavirus.jhu.edu/map.html
- POTHIAWALA, S., LAU, H. K. & ANNATHURAI, A. 2020. Regular versus extended shift outbreak roster in the emergency department and its impact on staff well-being.
 Emergency Medicine Journal, emermed-2020-210247.
- Varatharaj, A., Thomas, N., Ellul, M. A., Davies, N. W. S., Pollak, T. A., Tenorio, E. L., Plant, G. (2020). Neurological and neuropsychiatric complications of COVID-19 in 153 patients: a UK-wide surveillance study. The Lancet Psychiatry. doi: 10.1016/s2215-0366(20)30287-x
- World Health Organization: https://www.who.int/images/default-source/health-topics/coronavirus/
- Worldometer, Corona Virus https://www.worldometers.info/coronavirus/