

This update summarizes:

- ETHIOPIA'S COVID-19 SITUATION UPDATE.
- GLOBAL AND REGIONAL BURDEN OF COVID-19.
- THE EFFECTIVENESS OF PUBLIC HEALTH INTERVENTIONS AGAINST THE CORONA VIRUS PANDEMIC.
- INTERIM STATEMENT ON ASTRAZENECA COVID-19 VACCINE.

ETHIOPIA'S COVID-19 SITUATION UPDATES

- Since the last brief (01 April 2021), 14,955 new confirmed corona virus disease 2019 (COVID-19) cases and 193 new deaths have been reported nationally. To date, a total of 221,544 COVID-19 cases and 3058 related deaths (case fatality rate (CFR): 1.38) have been reported from 9 regions and 2 city administrations in the country. Compared to the cases and deaths reported a week ago, the national cumulative case and deaths respectively showed increment by 5% each.
- The distribution of cumulative cases by region is as follows: Addis Ababa 141,538, Oromia 30,260, Amhara 8,392, Tigray 6,662, Sidama 6,672, SNNPR 6,528, Direedawa 3,664, Harari 3,367, Benishangul-Gumuz 2,943, Afar 2,196, Somali 1,874, and Gambella 1,093. Over the last seven days, top reporting regions, Addis Ababa and Oromia region, have each reported more than 5k and 1k new cases respectively. Those two top reporting regions account for 81.6% of new cases identified over the week.

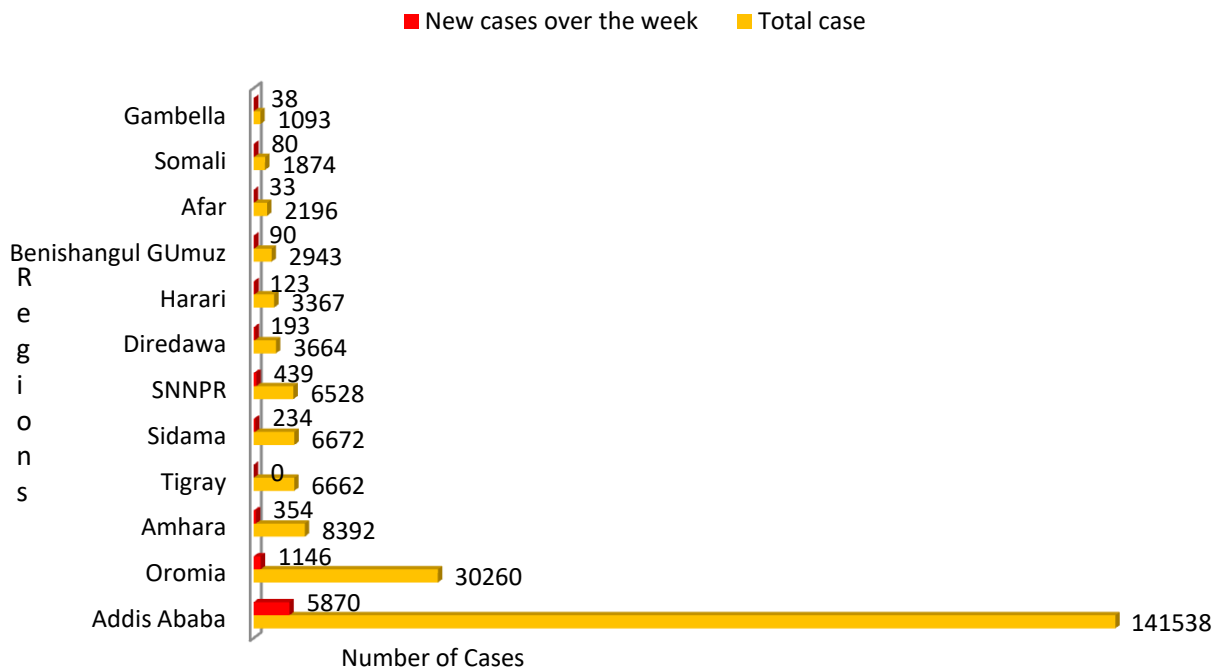


Fig1: Total cases and new cases (over a week time) by region.

- There are 53,255 active cases currently, of which 906 (1.7%) of them are critical. So far 166,135 cases have recovered from COVID-19, out of which 8,026 recoveries were over the last one week period which increased by 4% compared to the last week (Fig 2).

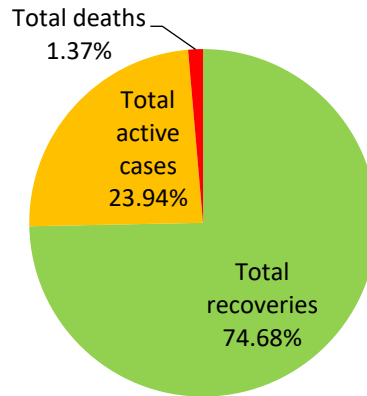


Fig 2: Proportions of active cases, recoveries and death as of April 01, 2021.

- The total number of tests done to date is 2,414,973 showing a 2% increase compared to last week. Among 58,080 laboratory samples tested over the last one week duration, 14,955 of them tested positive for COVID-19, yielding a positivity rate of 25.7%.

Case Management and Infection Prevention Control (Ipc):

- There are total of 52,349 active cases in the country currently as of April 8, 2021
- This week, April 1- April 8, 2021, there are 11291 newly recovered cases bringing the total number of COVID-19 recovered cases to 166,135
- There are 906 patients in severe condition as of April 8, 2021 and all the other patients are on medical care in stable condition

Home Based Isolation and Care (HBIC):

Since Home Based Isolation and Care (HBIC) is started in Ethiopia:

- A total 134,292 COVID-19 confirmed cases are followed in the HBIC as of April 8, 2021
- 114,709 of them have recovered in the HBIC as of April 8, 2021
- 20,928 cases are currently on HBIC
- 23 COVID-19 related deaths have occurred in the HBIC
- 1750 cases have been transferred from treatment centers to HBIC
- 609 cases have been transferred from HBIC to treatment centers

References

1. Public Health Emergency Operations Centers (PHEOC), Ethiopia
2. https://twitter.com/lia_tadesse
3. <http://www.covid19.et/covid-19/>

GLOBAL AND REGIONAL BURDEN OF COVID-19

- Globally the total number of cases is extended to 133,596,423 as of April 8, 2021. A total of 107,738,146 cases recovered and 2,896,588 people died since the beginning of the outbreak. Globally, in a week time, from April 1 to April 8, 2021, COVID-19 cases increased by 3.2% and deaths by 2.4%. In the past week, Europe was the leading in terms of cases followed by North America and Asia. Europe continued to be become a lead in terms of the number of deaths followed by North and South America (Fig 2).

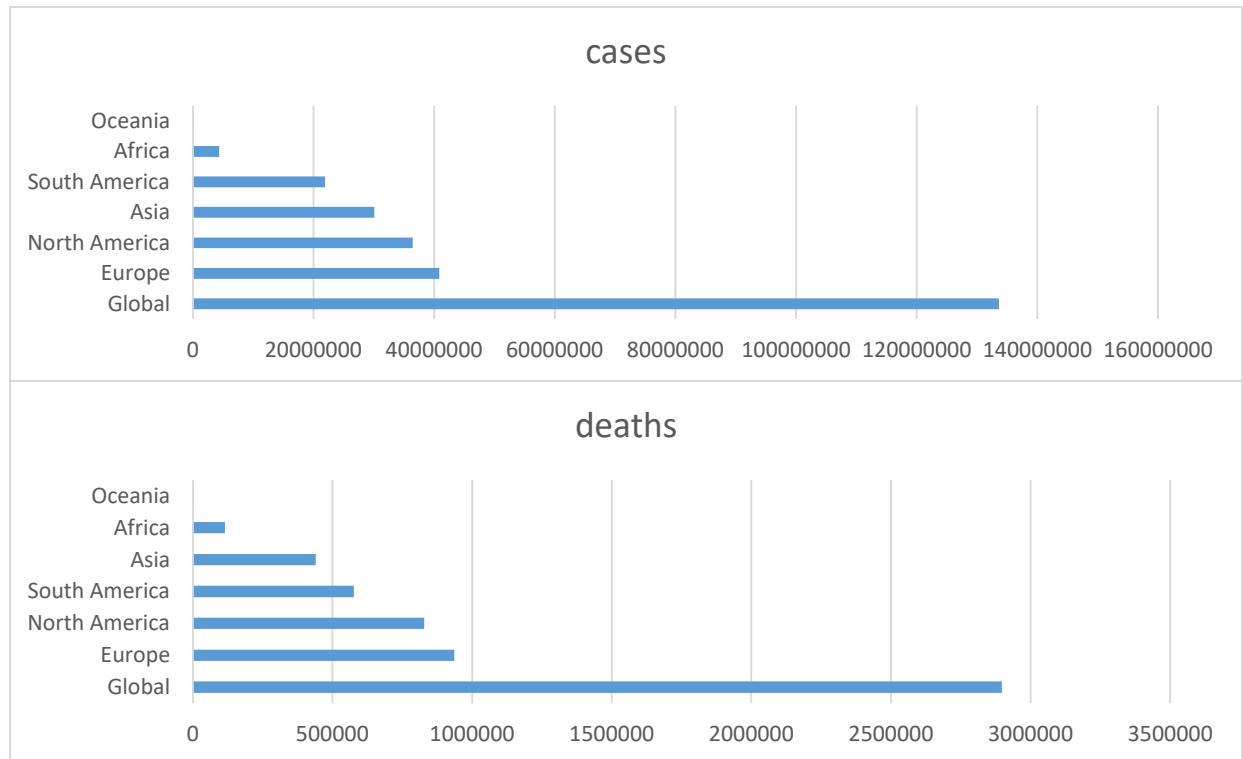


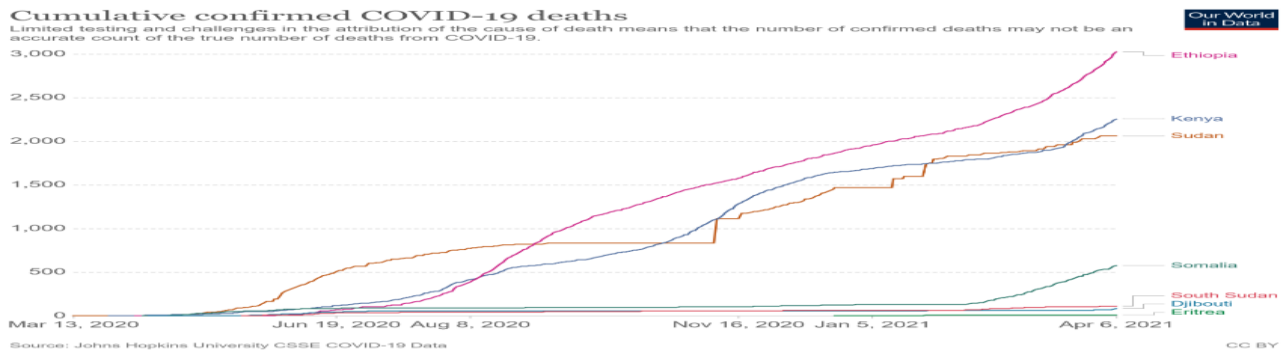
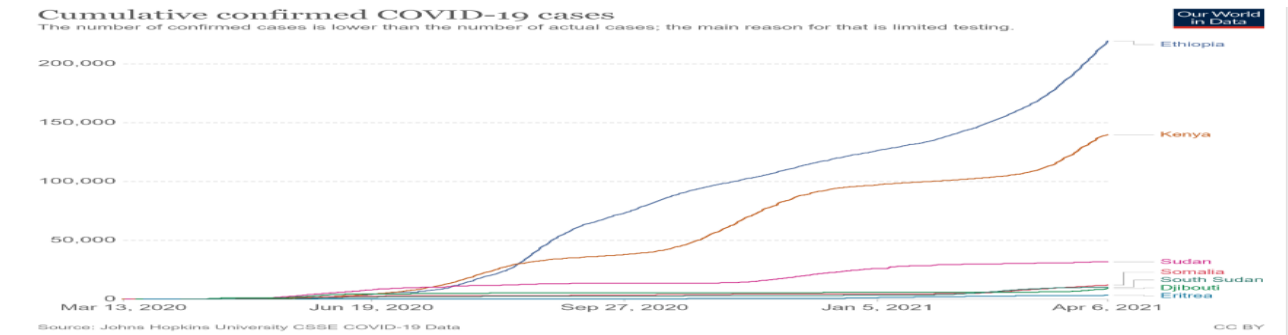
Fig 3. Global cases (top) and deaths (bottom) reported as of April, 2021.

- USA has recorded the highest number of cases 1.5% (31,166,344 to 31,624,899 cases) and 1.0% (565,256 to 570,870 deaths) that accounts 23.7% of the total global cases and carried 19.7% of global deaths as of April 8, 2021, showed a declining trend.
- Brazil became the 2nd rank worldwide with increased number of cases in a week time by 3.4% (12,753,258 to 13,193,205) and deaths by 5.9% (321,886 to 340,776).
- India is the 3rd highest in terms of cases in a week time by 5.8% (12,221,665 to 12,926,061) and deaths by 2.4% (162,960 to 166,892).
- France ranked 4th globally with 4,841,308 cases and 97,273 deaths.
- Russia ranked 5th globally replaced France with 4,606,162 cases and 101,480 deaths.
- The line share of Africa to the global COVID-19 pandemic was 3.2% and 4.0% of the global cases and deaths as of April 8). The cases in the continent have increased by 2% in a week time (4,251,595 to 4,334,878 cases). Similarly, the total number of deaths in Africa has increased from 113,036 to 114,833 showing 1.6%. Total recoveries stand at 3,884,507.

- South Africa is the leading in the continent with 1,553,609 cases and 53,111 deaths. Morocco (499,688 cases, 8,867 deaths), Tunisia (264,994 cases, 9,087 deaths), Ethiopia (221,544 cases, 3,058 deaths) and Egypt (206,510 cases, 12,253 deaths) are the most four leading countries next to South Africa in reporting COVID-19 cases in Africa. (See table below).

Africa	April 1		April 8	
	Cases	Deaths	Cases	Deaths
South Africa	1,548,157	52,846	1,553,609	53,111
Morocco	496,097	8,818	499,688	8,867
Tunisia	254,018	8,812	264,994	9,087
Ethiopia	206,589	2,865	221,544	3,058
Egypt	202,131	11,995	206,510	12,253

- In East African, COVID-19 cases and deaths have shown fast progress. As of March, Ethiopia and Kenya continued to be the major drivers of the COVID 19 burden in east African countries.



References

1. John Hopkins, Corona Virus Resources <https://coronavirus.jhu.edu/map.html>
2. Worldometer, Corona Virus <https://www.worldometers.info/coronavirus/>
3. Africa CDC: COVID 19 Surveillance; <https://au.int/covid19>
4. Our World: <https://ourworldindata.org/covid-cases>

THE EFFECTIVENESS OF PUBLIC HEALTH INTERVENTIONS AGAINST THE CORONA VIRUS PANDEMIC.

- Given the extensive impact of COVID-19 globally, there is international interest to learn from best practices that have been shown to work in controlling community spread to inform future outbreaks.
- The two main active interventions have been attempted or advocated to combat community spread of COVID-19 at earlier phases.
- The first is “containment”, involving quarantine of specific individuals based on tracing from their contact to a known infected individual or their history of recent travel to a high prevalence country or region.
- The second is “Mitigation” a strategy aiming to limit movement at the population level; social distancing ranges from limiting physical proximity between people to no less than one meter to community lockdown.
- At different points in the progression of COVID-19, several countries have implemented various policy strategies, with most applying a mixture of containment and mitigation to reduce disease burden, morbidity and mortality when faced with local exponential growth of infected cases, all whilst aiming to minimize social and economic disruption.
- An additional major consideration in policy discussions is how these interventions mitigates stress on healthcare systems so that essential medical care can be provided to non-COVID as well as COVID patients.
- This is the rationale for pursuing interventions that might not substantially reduce total numbers of infections but would rather “flatten the curve”.
- Given the extensive impact of COVID-19 globally, there is international interest to learn from best practices that have shown to work in controlling community spread to inform future epidemic outbreaks.
- As far as the COVID transmission dynamics concerned through exposure to an infected individual, some of the exposed individuals become infected, and transition to the infected asymptomatic health state. At the asymptomatic health state, infected individuals go through three infection stages latent, infectious, and non-infectious.
- All newly infected individuals move from asymptomatic latent state to asymptomatic infectious stage. During the asymptomatic infectious stage, some individuals will develop symptoms and transition from asymptomatic to symptomatic infectious state, while others will transition to non-infectious asymptomatic and eventually recover from the virus. Infected individuals in asymptomatic and symptomatic health state can be diagnosed through testing and move from undiagnosed to diagnosed health state. Non-infectious infected individuals (asymptomatic and symptomatic) will overtime recover and move to the recovered health state; infectious symptomatic infected individuals may either recover or die from the infection.
- Early public health measures in the context of targeted, aggressive containment including prompt and effective contact tracing and quarantine, was likely responsible for suppressing the number of COVID-19 infections successfully.

- These interventions should be combined with social distancing in the intervention packages currently being implemented across all countries and in future epidemic. Social distancing, though vital in slowing the growth of COVID-19, will be much less effective alone unless complemented with aggressive containment.

References

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2. Aravindan A. 'Drop everything, scramble': Singapore's contact trackers fight coronavirus. *Reuters*. 2020
3. Casella F. Can the COVID-19 epidemic be managed on the basis of daily data?; 2020.
4. Ansah JP, Matchar DB, Shao Wei SL, Low JG, Pourghaderi AR, Siddiqui FJ, et al. The effectiveness of public health interventions against COVID-19: Lessons from the Singapore experience 2021. *PLoS ONE* 16(3): e0248742. <https://doi.org/10.1371/journal.pone.0248742>

INTERIM STATEMENT ON ASTRAZENECA COVID-19 VACCINE.

- The COVID-19 subcommittee of the WHO Global Advisory Committee on Vaccine Safety (GACVS) has reviewed reports of rare cases of blood clots with low platelets following vaccination with the AstraZeneca COVID-19 vaccine (including Covishield) since their onset a few weeks ago.
- The subcommittee reviewed the latest information from the European Medicines Agency along with information from the United Kingdom's Medicines and other Health products Regulatory Agency (MHRA), and the other Member States and noted the following:
 - Based on current information, a causal relationship between the vaccine and the occurrence of blood clots with low platelets is considered plausible but is not confirmed. Specialized studies are needed to fully understand the potential relationship between vaccination and possible risk factors.
 - It is important to note that whilst concerning, the events under assessment are very rare, with low numbers reported among the almost 200 million individuals who have received the AstraZeneca COVID-19 vaccine around the world.
 - Rare adverse events following immunizations should be assessed against the risk of deaths from COVID-19 disease and the potential of the vaccines to prevent infections and reduce deaths due to diseases. In this context, it should be noted that as of today, at least 2.86 million people have died of COVID-19 disease worldwide.
 - Side effects within two- or three days following vaccination, the majority of which are mild and local in nature, are expected and common. However, individuals who experience any severe symptoms – such as shortness of breath, chest pain, leg swelling, persistent abdominal pain, neurological symptoms, such as severe and persistent headaches or blurred vision, tiny blood spots under the skin beyond the site of the injection - from around four to 20 days following vaccination, should seek urgent medical attention.
 - Clinicians should be aware of relevant case definitions and clinical guidance for patients presenting thrombosis and thrombocytopenia following COVID-19 vaccination. To this end, the GACVS subcommittee also suggested that a committee of clinical experts including hematologists and other specialists is convened, for advice on

clinical diagnosis and case management. Active surveillance, including sentinel site/hospital case-based investigations, should be considered, to further characterize these rare events.

- An extensive vaccination campaigns, it is normal for countries to identify potential adverse events following immunization. This does not necessarily mean that the events are linked to the vaccination itself, but they must be investigated to ensure that any safety concerns are addressed quickly. Vaccines, like all medicines, can have side effects. The administration of vaccines is based on a risk versus benefit analysis.

References

1. AstraZeneca's COVID-19 vaccine: EMA finds possible link to very rare cases of unusual blood clots with low blood platelets | European Medicines Agency [Internet]. [cited 2021 Apr 8]. Available from: <https://www.ema.europa.eu/en/news/astrazenecas-covid-19-vaccine-ema-finds-possible-link-very-rare-cases-unusual-blood-clots-low-blood>
2. Interim statement of the COVID-19 subcommittee of the WHO Global Advisory Committee on Vaccine Safety on AstraZeneca COVID-19 vaccine [Internet]. [cited 2021 Apr 8]. Available from: <https://www.who.int/news/item/07-04-2021-interim-statement-of-the-covid-19-subcommittee-of-the-who-global-advisory-committee-on-vaccine->