

IDI COVID-19 Science Summary Compiled by Dr Andrew Mujugira (6th Sept to 12th Sept 2020)

6th September 2020

To catch a flea, people wet their finger with saliva

Saliva COVID-19 Test

A COVID-19 saliva test developed by researchers at Yale University may perform at least as well as nasal swabs.

In a study of 70 hospital patients with COVID-19, the test detected more SARS-CoV-2 RNA copies in saliva specimens than in nasopharyngeal swab specimens (mean log copies per milliliter, 5.58 [95% CI: 5.09-6.07] and 4.93 [95% CI: 4.53-5.33], respectively). These findings suggest that saliva and nasopharyngeal swab specimens have at least similar sensitivity for SARS-CoV-2 detection in hospital patients.

Self-collection of saliva samples negates the need for direct interaction between health care workers and patients and alleviates demands for supplies of swabs and personal protective equipment.

N Engl J Med. 2020 Aug 28

7th September 2020

Between a rock and a hard place - English idiom

COVID Outbreaks at US Universities

'Federal and state funding for US public universities has declined in recent years making them increasingly reliant on tuition and fees. Reopening during the pandemic forces them to choose between a rock (a public-health disaster) and a hard place (financial calamity)'

'The University of North Carolina-Chapel Hill reopened in early August. Within nine days, it had shifted to online teaching, and students had begun moving out of dormitories. By 3rd September, 1,075 students and 60 employees at the university had tested positive for the coronavirus'

'Approximately 24,000 COVID-19 cases have been reported at US universities since late August as students return for the Fall quarter. Faculty, staff and students are protesting against unsafe conditions as institutions reopen. Universities will never be the same after the coronavirus crisis'

Source: Nature.com

8th September 2020

You can't measure a snake until it's dead ~ African Proverb

Russian COVID-19 vaccines

'Results from two early-phase Russian non-randomised vaccine trials (Sputnik V) in a total of 76 people show that two formulations (frozen and freeze-dried) of a two-part vaccine have a good safety profile with no serious adverse events detected over 42 days'

'The phase 1 trials looked at safety in a total of 36 patients, and the phase 2 trials, totalling 40 people, found that the vaccines induced antibody responses in all participants within 21 days. Secondary outcomes from the trial also suggest the vaccines also produce a T cell response within 28 days.'

'Large, long-term trials including a placebo comparison, and further monitoring are needed to establish the long-term safety and effectiveness of the vaccine for preventing COVID-19 infection'.

The Lancet, 4th September 2020

9th September 2020

One head does not contain all the wisdom ~ Ghanaian Proverb

COVID-19 vaccine trials in Africa

The first COVID-19 vaccine trial on the continent (Ox1Cov-19 vaccine) started on 23rd June at Witwatersrand University (Wits) in South Africa, in collaboration with Oxford University and the Jenner Institute.

The second trial started on 17th August, 2020. Novavax and Wits University are testing the NVX-CoV2373 vaccine in 2,665 healthy adults and ~240 medically stable, HIV-positive adults. The third trial (Ad26.COVS vaccine, a Johnson & Johnson product) is set for September, 2020 in South Africa.

Oxford University awaits final clearance to conduct clinical trials in Kenya. In Uganda, UVRI aims to start a vaccine trial in December 2020, in collaboration with Imperial College London. Rather than be passive recipients of vaccines developed and tested elsewhere, African researchers are generating data on the safety and efficacy of vaccine candidates among African populations.

Munyaradzi Makoni, The Lancet Respiratory Medicine, September 4, 2020

10th September 2020

AstraZeneca Pauses Vaccine Trial for Safety Review

'AstraZeneca has halted a COVID-19 vaccine trial due to a suspected adverse reaction. A volunteer in the UK was found to have transverse myelitis, an inflammatory syndrome that affects the spinal cord and is often sparked by viral infections. However, the timing of this diagnosis, and whether it was directly linked to AstraZeneca's vaccine, remains unclear'.

'AstraZeneca's vaccine is currently in Phase 2/3 trials in England and India, and in Phase 3 trials in Brazil, South Africa and the United States. The vaccine, known as AZD1222, relies on a chimpanzee adenovirus that has been modified to carry coronavirus genes and deliver them into human cells.'

'There are currently nine vaccine candidates in Phase 3 trials. AstraZeneca's is the first Phase 3 COVID-19 vaccine trial known to have been put on hold by a Data and Safety Monitoring Board'.

The New York Times

11th September 2020

He who is in the canoe: pulls out his friends out of the water - Luganda Proverb

Intersecting Stigmas: COVID-19 and Mental Health

Healthcare workers (HCW) comprise 3.8% of COVID-19 infections reported from 42 African countries. In the past week, eight African countries reported 249 new HCW infections including Kenya (105) and Uganda (52).

Stressors during quarantine include fear for own health, fear of infecting others, frustration and boredom due to confinement/loss of regular routine, and diminished social and physical contact with others.

Quarantined HCW show more severe symptoms of post-traumatic stress than quarantined members of the public. Mental health support is needed to mitigate quarantine-related stigmatization (avoidance and rejection by others) and other negative effects.

Lancet. 2020 Mar 14;395(10227):912-920; WHO Africa Office

12th September 2020

When the bush is on fire the chameleon learns to run fast ~ African Proverb

Healthcare Avoidance due to COVID-19

'Delayed or avoided medical care might increase morbidity and mortality associated with both chronic and acute health conditions'.

'By June 30, 2020, because of concerns about COVID-19, an estimated 41% of U.S. adults had delayed or avoided medical care including urgent or emergency care (12%) and routine care (32%). Avoidance of urgent or emergency care was more prevalent among unpaid caregivers for adults, persons with underlying medical conditions, Black adults, Hispanic adults, young adults, and persons with disabilities.'

'Understanding factors associated with medical care avoidance can inform targeted care delivery approaches and communication efforts encouraging persons to safely seek timely routine, urgent, and emergency care'.

MMWR Morb Mortal Wkly Rep 2020; 69:1250–1257
