

IDI COVID-19 Science Summary Compiled by Dr Andrew Mujugira (9th to 15th August 2020)

9th August 2020

Ain't no use askin' a cow to pour you a glass of milk ~ African American Proverb

SARS-CoV-2 viral load predicts COVID-19 mortality

1. SARS-CoV-2 viral load might correlate with infectivity, disease phenotype, morbidity, and mortality.
2. Viral load was quantified from nasopharyngeal swabs collected from 1,145 symptomatic, hospitalised patients in New York (mean age 65, 57% male) between 13th March & 4th May. Viral load was independently associated with mortality (hazard ratio 1.07; 95% CI: 1.03–1.11; $p=0.0014$).
3. Quantitative viral load may assist clinicians in risk-stratifying patients with COVID-19.

The Lancet Respiratory Medicine, August 6, 2020

10th August 2020

The beer straw of a talker: is full of spittle ~ Ganda Proverb

SalivaDirect SARS-CoV-2 Test

1. 'A quick, cheap and painless test that detects SARS-CoV-2 RNA in saliva could be used for mass testing'.
2. 'SalivaDirect detected 32 out of 34 samples that tested positive in nose and throat swabs, and 30 out of 33 negative samples.'
3. 'The saliva test is less invasive, does not need to be conducted by a trained professional and avoids the use of scarce RNA extraction kits. Cost-per-test is \$1.29–\$4.37 vs. ~\$65 for PCR'.

Nature News, 7th August 2020

11th August 2020

Dog don't get mad when you say he's a dog ~ African American Proverb

Symptomatic and asymptomatic persons with SARS-CoV-2 have similar viral loads

Little is known about viral loads of asymptomatic people with SARS-CoV-2 infection.

Of 303 persons quarantined with SARS-CoV-2 infection in South Korea, 110 (36.3%) were asymptomatic and 21 (19.1%) developed symptoms during isolation. Median time to symptom onset was 15 days. Importantly, symptomatic and asymptomatic patients had similar viral loads.

Most individuals with SARS-CoV-2 infection remained asymptomatic for a prolonged period. Isolation of infected persons should be performed regardless of symptoms.

JAMA Intern Med, 6th August 2020

12th August 2020

If you want to go quickly, go alone. If you want to go far, go together ~ African Proverb

Sputnik V COVID Vaccine

- 1) Russia plans to roll out a COVID-19 vaccine, named Sputnik V, to the general population in October, hoping to be the first country to start mass vaccinations. Sputnik, the first satellite in orbit, was launched by the Soviet Union in 1957.
 - 2) The vaccine has completed Phase 1 testing, but no safety and immunogenicity data have been published. It has not yet been tested in a Phase 3 efficacy trial.
 - 3) Vaccines are approved after rigorous review of safety and efficacy data from Phase 3 trials. National prestige should not override public safety.
-

13th August 2020

If you see your enemy accompanying your creditor: you will have a sleepless night ~ Ganda Proverb

SARS-CoV-2 Prevalence in HCW

- 1) Testing health care workers (HCW) with SARS-CoV-2 exposure helps protect themselves, their patients, their colleagues, and their families.
- 2) Among 40,329 HCW in New York state (median age 42 years, 73.7% women, 28.4% nurses and 9.3% physicians), 5,523 (13.7%) were seropositive. High suspicion of virus exposure (relative risk 1.23; 95% CI, 1.18-1.28; $P < 0.001$) was associated with seroprevalence.
- 3) SARS-CoV-2 prevalence among HCW was lower than the general public in New York (21.2%). Since HCW are exposed to a much higher density of the virus, this suggests that current PPE practices are protective.

JAMA, 6th August 2020

14th August 2020

When you are starving, the colour of the hand that feeds you does not matter.

COVID Mental Health Myths

Myth 1: Most people will struggle mentally. Generalized trauma, like earthquakes or pandemics, tends to lead to resilience. Individualized trauma like domestic violence or sexual assault, is more likely to develop into post-traumatic stress disorder.

Myth 2: Resilience means no bad days. Human beings are not unbreakable. Resilience is having the ability to have bad days or weeks but finding a way to go on.

Myth 3: Short-term mental health isn't at risk. Whereas long-term resilience is the norm, short-term distress is common. Studies show ~95% of people experience acute stress in the hours or days after trauma. If you're experiencing mental health issues, it's important to seek help.

Psychol Trauma. 2020 Aug;12(S1):S47-S48

15th August 2020

One who works for food does not do so only once ~ Luganda Proverb

COVID-19 Disparities

Long-standing health and social inequities have resulted in increased risk for infection, severe illness, and death from COVID-19 among communities of color.

Among 79 US counties identified as hotspots, a disproportionate number of COVID-19 cases occurred among underrepresented racial/ethnic groups in almost all areas during February–June 2020.

Identifying health disparities in COVID-19 hotspot counties can inform testing and prevention efforts. Addressing the pandemic's disproportionate incidence among communities of color can improve community-wide health outcomes related to COVID-19.

MMWR Morb Mortal Wkly Rep. ePub: 14 August 2020
