IDI COVID-19 Science Summary Compiled by Dr Andrew Mujugira (26th July to 1st August 2020)

26th July 2020

He who learns, teaches ~ Ethiopian proverb

Secondary School Outbreak of SARS-CoV-2

Ten days after Israeli schools fully reopened on 17 May, two students at a secondary school in Jerusalem were diagnosed with COVID-19.

Subsequently, 153 students and 25 members of staff became infected. By mid-June, another 87 cases had occurred among their close contacts.

Spread of SARS-CoV-2 was probably aided by a heat-wave that occurred from 19-21st May. There was heavy use of air-conditioning and students were allowed to remove face masks. Crowding might also have contributed - each of the school's classrooms held 35 to 38 students (1.1–1.3 square metres per student).

Euro Surveill. 2020;25(29)

27th July 2020

Dine with a stranger but save your love for your family ~ Ethiopian proverb

Lockdown Lessons

1) Prioritize family and friends

Quarantine forced us to slow down in ways we hadn't since?? Stop, reflect, and recharge. Put less pressure on yourself. There are more important things in life than work. Focus on family members and friends. Reconnect with loved ones. We all need social connections. No woman or man is an island.

2) Healthy living

Quarantine reinforced the need for daily exercise and eating healthful foods. Exercise helps us clear our minds, improve our mood and sleep better. Go for walks. Hold hands. Reconnect with nature. Cook, bake, grow vegetables. You are what you eat.

3) Work from home, if possible

Working from home can be as productive as being in an office from 8-5. Meeting attendance is higher via Zoom than in-person. Less time spent in traffic means less stress, more sleep and reduced pollution. Working remotely has been destigmatized.

28th July 2020

A horse has four legs, yet it often falls ~ Nigerian Proverb

- 1) 'Little is known about the clinical course of COVID-19 and return to baseline health for persons with milder, outpatient illness'.
- 2) 'A survey of 292 symptomatic adults who had a positive outpatient test result for SARS-CoV-2 infection found that 35% had not returned to their usual state of health when interviewed 2–3 weeks

after testing. Among persons aged 18–34 years with no chronic medical conditions, one in five had not returned to their usual state of health'.

3) 'COVID-19 can result in prolonged illness, even among young adults without underlying chronic medical conditions'.

MMWR Morb Mortal Wkly Rep. ePub: 24 July 2020

29th July 2020

You cannot tell a hungry child that you gave him food yesterday ~ Zimbabwean Proverb

Child malnutrition and COVID-19

- 1) Child malnutrition wasting, stunting, micronutrient deficiencies and overweight will increase during COVID lockdowns due to steep declines in household incomes, availability and affordability of nutritious foods and coverage of nutrition services.
- 2) One in ten deaths among children ≤5 years in LMICs is attributable to severe wasting because wasted children are at increased risk of mortality from infectious diseases.
- 3) Modelling studies estimate an additional 6.7 million children with wasting 80% of them in sub-Saharan Africa and south Asia and >10,000 additional child deaths per month during the first 12 months of the pandemic.

The Lancet July 27 2020

30th July 2020

The elephant's tusk is not too heavy for the owner - Langi Proverb

COVID-19 Sex Differences

- 1) Non-menopausal females infected with SARS-CoV-2 have lower mortality and better outcomes than males.
- 2) In a study of 1,902 patients, severe COVID-19 occurred among 76 non-menopausal females compared with 124 age-matched males (p<0.01). None of the non-menopausal females died, compared with 16 deaths among age-matched males (p<0.01). There were no differences in disease severity (p=0.83) or clinical outcomes (p=0.49) in menopausal females versus age-matched males.
- 3) Anti-Müllerian hormone [AHR 0.15] and estradiol (E2) [AHR 0.30] were negatively correlated with COVID-19 severity and are potential protective factors. E2 may exert its effect by regulating cytokines linked to immunity and inflammation. Menopause appears to be an independent risk factor for female COVID-19 patients.

Clin Infect Dis. 2020 Jul 22

To get lost is to learn the way ~ African proverb

Hydroxychloroquine for COVID-19 Treatment

A recent systematic review and meta-analysis (study of studies) of 103,486 persons with COVID-19 found:

- 1) No significant clinical effectiveness for hydroxychloroquine (HCQ) in the treatment of COVID-19 (RR 1.03, 95% CI, 0.79-1.34)
- 2) No effect when HCQ was combined with azithromycin (AZM) (RR: 1.26, 95% CI, 0.91-1.74)
- 3) No significant differences in death rates for either HCQ (RR: 0.92, 95% CI, 0.72-1.16) or HCQ + AZM (RR: 1.72, 95% CI, 0.86-3.42)
- 4) No substantial difference in disease progression between HCQ group and controls (RR: 1.23, 95% CI, 0.65-2.30)

medRxiv 2020.04.14.20065276

1st August 2020

One who pleads in court with lies: pleads stubbornly - Ganda Proverb

COVID Infodemiology

- 1) Conspiracy theories and misinformation proliferate in times of uncertainty and fear. Protagonists and propagators of fake news are often motivated by political and financial gain.
- 2) An infodemic is an overabundance of information—some accurate and some not—that makes it harder for people to find trustworthy sources and reliable guidance when needed. Infodemiology is the science of managing infodemics.
- 3) COVID infodemiology requires clear, simple, and honest messaging. The key to infodemics is not to produce even more information, but to address the environmental and social factors that make spreading misinformation easy.

The Lancet, Vol. 396, No. 10247