IDI COVID-19 Science Summary Compiled by Dr Andrew Mujugira (13th Sept to 19th Sept 2020)

13th September 2020

A person who wants what is under a bed must bend over to get it ~ Teso Proverb

As the COVID-19 pandemic enters its 10th month, greater patient survival suggests that treatment of severe disease has improved.

Countries with a resurgence of COVID-19 cases (USA, France, and Spain) have not experienced a comparable increase in hospital admissions or deaths.

Decreased mortality may be due to:

- a) Better supportive treatment
- b) Lower viral load during transmission due to face masks and physical distancing
- c) Distribution of cases towards younger age groups who have lower mortality
- d) Widespread testing with earlier detection

Whatever the reasons for apparent declining mortality, effective drug treatments are needed for COVID-19.

The Lancet Infectious Diseases, September 10, 2020

15th September 2020

The child says what she has heard at home ~ Nigerian Proverb

SARS-CoV-2 Transmission from Children

- 1) 'Children aged ≥10 years have been shown to transmit SARS-CoV-2 in school settings'.
- 2) From April-July 2020, 12 children acquired COVID-19 in child care facilities in Utah, USA. 'Transmission was documented from these children to at least 12 (26%) of 46 non-facility contacts (confirmed or probable cases). One parent was hospitalized. Transmission was observed from two of three children with confirmed, asymptomatic COVID-19'.
- 3) 'SARS-CoV-2 Infections among young children acquired in child care settings were transmitted to their household members. Testing of contacts of laboratory-confirmed COVID-19 cases in child care settings, including children who might not have symptoms, could improve control of transmission from child care attendees to family members.'

MMWR Morb Mortal Wkly Rep. ePub: 11 September 2020

16th September 2020

Where there are many people: somebody will be offended ~ Luganda Proverb

Anti-maskers and COVID-19

1) Anti-maskers (people opposing mask usage) claim that face coverings decrease oxygen flow and can lead to illness. They feel their risk is minimal, doubt the benefits of masks or don't take COVID seriously.

- 2) The anti-mask movement shares similarities with the anti-vaccine movement. For both, social media is a primary source of misinformation and conspiracy theories about vaccines, microchips, one world government, Big Pharma, and Bill Gates.
- 3) Refusing to mask, failing to physically distance or vaccinate children are linked to spread of preventable disease and death. Is one person's right to ignore public health advice more important than someone else's right to live?

Medscape Medical News

17th September 2020

You block the hole after the hyaena has taken the goat ~ Runyoro Proverb

COVID Deaths Among Persons <21 Years

- 1) 'Symptoms associated with SARS-CoV-2 infection are milder in children compared with adults'.
- 2) 'Among 121 SARS-CoV-2—associated deaths among persons aged <21 years reported to CDC by July 31, 2020, 12 (10%) were infants and 85 (70%) were aged 10—20 years. [Non-White] persons accounted for 94 (78%) of these deaths; 33% of deaths occurred outside of a hospital'.
- 3) 'Persons aged <21 years exposed to SARS-CoV-2 should be monitored for complications. Ongoing surveillance for SARS-CoV-2—associated infection, hospitalization, and death among persons aged <21 years should be continued as schools reopen in the United States'.

MMWR Morb Mortal Wkly Rep. ePub: 15 September 2020

18th September 2020

If you burn a house, can you conceal the smoke? ~ African Proverb

The Race for SARS-CoV-2 Vaccines

In a reversal of vaccine development timelines, Russian authorities approved the Sputnik V COVID vaccine on 11th August, commenced Phase 3 trials on 26th August, and published Phase 1/2 data in the Lancet on 4th September 2020.

An open letter from a group of scientists has flagged possible duplications in The Lancet paper. Nine out of 9 volunteers given the rAd26-S vector appear to have identical antibody titres at 21 and 28 days, as do 7 out of 9 volunteers challenged with the rAd5-S vector. It is unusual for people tested with different formulations of a vaccine to have the same antibody levels.

The Lancet has invited the study authors to address questions raised in the open letter. The lead author says he does not intend to respond. Independent review of trial data should resolve these issues.

19th September 2020

A tree does not fall on someone who is not there ~ African Proverb

COVID-19 and the US School-to-Prison Pipeline

- 1) The US school-to-prison pipeline is characterized by harsh school disciplinary approaches which place adolescents on a trajectory to juvenile and adult incarceration. This pipeline is most pronounced for Black and Hispanic students, and students with disabilities.
- 2) The COVID pandemic forced schools to shift to virtual learning, placing US adolescents out of the reach of the school-prison pipeline. This resulted in a 27% reduction in the adolescent detention population between March and May 2020, with no apparent increase in juvenile crime.
- 3) Juvenile detention costs \$247 per adolescent per day, money better spent on improving education and healthcare for vulnerable adolescents.

The Lancet Child & Adolescent Health, September 17, 2020