

IDI COVID-19 Science Summary Compiled by Dr Andrew Mujugira (8th Nov to 14th Nov 2020)

10th November 2020

Good news spreads farther than the sound of a drum ~ African Proverb

It Works!

- 1) Drug company Pfizer and BioNTech announced on 9th November that a Phase III study of the SARS-CoV-2 vaccine candidate BNT162b2 was more than 90% effective in preventing COVID-19.
 - 2) The trial which began on 27th July 2020 enrolled 43,538 participants of whom 38,955 had received a second dose of the vaccine as of 8th November. There were 94 confirmed cases of COVID-19 in trial participants. No serious safety concerns were been observed. The trial will continue until a total of 164 COVID-19 cases are detected. Therefore, initial estimates of the vaccine effectiveness could change.
 - 3) Many unknowns remain. Does the vaccine protect against moderate and severe infections? Does it prevent asymptomatic persons from transmitting SARS-CoV-2? How well does it work in different groups of trial participants? How long does protection last?
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11th November 2020

Repetitive hammering leaves a crack ~ African Proverb

Readmission after COVID-19 Discharge

- 1) 'Evidence suggests that potential health complications after COVID-19 illness might require ongoing clinical care'.
- 2) 'After discharge from an initial COVID-19 hospitalization, 9% of patients were readmitted to the same hospital within 2 months of discharge. Multiple readmissions occurred in 1.6% of patients. Risk factors for readmission included age ≥ 65 years, presence of certain chronic conditions, hospitalization within the 3 months preceding the first COVID-19 hospitalization, and discharge to a skilled nursing facility or with home health care'.
- 3) 'Understanding frequency of, and potential reasons for, readmission after a COVID-19 hospitalization can inform clinical practice, discharge disposition decisions, and public health priorities, such as health care resource planning'.

MMWR Morb Mortal Wkly Rep. ePub: 9 November 2020

12th November 2020

The chicken that digs for food will not sleep hungry ~ African Proverb

- 1) Russian researchers have issued a press release announcing positive results from their Phase 3 Sputnik V COVID-19 vaccine trial, two days after positive news from the Pfizer/BioNTech vaccine trial.
- 2) An interim analysis of 16,000 volunteers - given either the vaccine or a placebo - 3 weeks after they received the first dose identified 20 COVID-19 cases, suggesting vaccine efficacy was 92%. By contrast, the Pfizer/BioNTech trial results (also announced via a press release) were based on 94 COVID-19 cases — and reported >90% effectiveness, when measured a week after participants got their second dose.

3) The speed of COVID-19 vaccine development is remarkable. However, neither trial has published results in peer-reviewed journals. Data from longer term follow up will provide a clearer indication of vaccine efficacy.

Nature 11th November 2020

13th November 2020

Two things cannot be hidden: being astride a camel and being pregnant ~ Lebanese Proverb

SARS-CoV-2 Seroprevalence in Kenya

1) Africa accounts for 17% of the global population, but only 5% of global COVID-19 cases and 3% of deaths, perhaps because of a younger population, higher proportion of asymptomatic and mild cases, early implementation of containment measures and limited testing capacity.

2) A large SARS-CoV-2 antibody study sought to determine the prevalence of anti-SARS-CoV-2 IgG among blood donors in Kenya from April-June 2020. National seroprevalence was 4.3% (95% CI 2.9-5.8%) and was highest in urban counties - Mombasa (8.0%), Nairobi (7.3%) and Kisumu (5.5%).

3) A transfusion donor seroprevalence of 4.3% suggests ~1.3 million SARS-CoV-2- infections in Kenya, yet only 2,093 had been detected by May 2020, indicating that SARS-CoV-2 infection is more extensive than suggested by case-based surveillance.

Science. 2020 Nov 11; eabe1916
