

Weekly Evidence Report



Health Technology Assessment Philippines

7-13 November 2020

Overview

The following report presents summaries of evidence the Department of Health (DOH) - Health Technology Assessment (HTA) Unit reviewed for the period of 7 to 13 November 2020. The HTA Unit reviewed a total of 12 studies and 1 local Unified Algorithm for the said period.

Evidence includes 3 studies on Epidemiology; 2 studies on Transmission; 1 study on Drugs; 1 study on Vaccines, 2 studies on Equipment and Devices; 2 studies on Medical and Surgical Procedures; 0 studies on Traditional Medicine; and 1 study on Preventive & Promotive Health.

The following report notes that N studies have not been peer-reviewed, each highlighted accordingly.



Sections

Epidemiology

Transmission

Drugs

Vaccines

Equipment & Devices

Medical & Surgical Procedures

Traditional Medicine

Preventive & Promotive Health

Evidence on Epidemiology

Local COVID-19 Tracker: <https://www.doh.gov.ph/covid19tracker>Local COVID-19 Case Tracker: <https://www.doh.gov.ph/covid-19/case-tracker>

Date	Author/s	Title	Journal/ Article Type	Summary
11 Nov 2020	ASEAN Biodiaspora Virtual Center	Risk Assessment for International Dissemination of COVID-19 to the ASEAN Region	ASEAN Biodiaspora Virtual Center (Situation Report)	<ul style="list-style-type: none"> Globally, 51.73 million cases have been reported with 1.27 million deaths related to COVID-19. China-based Sinovac Biotech vaccine candidate was halted at phase 3 trial in Brazil as a serious adverse event occurred. Paused trials were also seen in phase 3 trials of AstraZeneca and Johnsons & Johnson's vaccine candidates 90% effectiveness was reported in the Pfizer and BioNTech phase 3 trials in preventing disease manifestation in subjects with no prior infection. Pfizer predicts that with these preliminary data, they are on track for Emergency Use Authorization later this month Singapore targets the release of a COVID-19 vaccine by the early months of 2021.
8 Nov 2020	WHO	COVID-19 Weekly Epidemiological Update	WHO (Situation Report)	<ul style="list-style-type: none"> An 8% increase in COVID-19 cases globally seen compared to the previous week The Western Pacific region with 19% increase in new cases showed the largest proportional increase Europe however has the largest chunk of new cases and deaths in 7 days with 54% and 47% of cases and deaths respectively. Southeast Asia reports continuous declines in trends but still notes a weekly increase of 2% in new cases and 10% for deaths in the region.

Date	Author/s	Title	Journal/ Article Type	Summary
12 Nov 2020	Sze, et.al.	Ethnicity and clinical outcomes in COVID-19: A systematic review and Meta-analysis	Lancet (Systematic Review and Meta-analysis)	<ul style="list-style-type: none"> 50 studies including 18,728,893 patients were included. 42 studies from the USA and 8 from the UK Pooled adjusted relative Risk for Black ethnicity is at 2.02 (95%CI, 1.67% to 2.44%), For Asians it was noted at 1.50 (95% CI, 1.24% to 1.83%), People with Black and Asian ethnicity are noted to be at higher risk for COVID-19 infection compared to those of White ethnic backgrounds

Evidence on Transmission

Date	Author/s	Title	Journal/ Article Type	Summary
11 Nov 2020	HIQA	Evidence summary of the duration of immunity and reinfection following SARS-CoV-2 infection	HIQA (Evidence Summary)	<ul style="list-style-type: none"> 10 studies were included that reviewed reinfection and antibody responses beyond 60 days after SARS-CoV-2 infection The average age of reinfection was 40 years old with duration of reinfection happening between 13 and 142 days 22 studies included studying the duration of antibody responses after COVID-19 infection past 60 days. All studies noted 100% IgG seropositivity at 60-79 days after infection decreasing to 78-100% seropositivity by 80-99 days. Half of the studies noted maintained or increased titers until the end of follow-up while the rest noted decreasing titers

Date	Author/s	Title	Journal/ Article Type	Summary
9 Nov 2020	Gale, et.al.	Characteristics and outcomes of neonatal SARS-CoV-2 infection in the UK: a prospective national cohort study using active surveillance	Lancet Child Adolescent Health (Cohort Study)	<ul style="list-style-type: none"> 66 SARS-CoV-2 confirmed babies included in the cohort study following the first 28 days of life in those who've received inpatient care between 1 March to 30 April 2020 via active national surveillance 42% of the 66 had severe neonatal SARS-CoV-2 infection, 16 (24%) were preterm, With ethnicity described as 55% from white groups, 21% from Asian descent, 12% from Black descent, and 11% were from mixed or other ethnic groups. 3% were born to mothers with known perinatal SARS-CoV-2 infection 12 hours prior birth while 12% had suspected nosocomial infections. Overall, 55 (88%) were discharged home, 7 (11%) still admitted, and 1 (2%) died due to SARS-CoV-2 infection

Evidence on Drugs

Date	Author/s	Title	Journal/ Article Type	Summary
12 Nov 2020	Eberle, et.al.	The repurposed drug suramin and quinacrine inhibit cooperatively in vitro SARS-CoV-2 3CLpro	MedXRiv (Experimental Study)	<ul style="list-style-type: none"> Cooperative inhibition of Quinacrine and Suramin could become a possible alternative for COVID-19 infections 1:1 combination of the two drugs create an effective anti-3CLpro activity showing its possibility to be repurposed for COVID-19 infections

Evidence on Vaccines

Date	Author/s	Title	Journal/ Article Type	Summary
12 Nov 2020	CADTH	Government of Canada:Preliminary Guidance on Early COVID-19 Immunization	CADTH (News Article/linked Guidance Document)	<ul style="list-style-type: none"> • A preliminary guideline policy was drafted by the National Advisory Committee on Immunization • With limited initial vaccines, key populations would be prioritized

Evidence on Equipment & Devices

Date	Author/s	Title	Journal/ Article Type	Summary
12 Nov 2020	Coryell, et.al.	Validation and testing of a method for detection of SARS-CoV-2 RNA in healthy human stool	MedXRiv	<ul style="list-style-type: none"> • In this study, stool samples were spiked with inactivated SARS-CoV-2 virus. A modified version of the CDC rRT-PCR-SARS-CoV-2 test was used • The lower limit of detection was noted at 3,000 viral RNA copies per gram. 100% detection across 20 replicates noted as well. • At 4 degrees celsius and at ambient temperature, the samples were stable

Date	Author/s	Title	Journal/ Article Type	Summary
11 Nov 2020	Mulchandani, et.al.	Accuracy of UK Rapid Test Consortium (UK-RTC) "AbC-19 Rapid Test" for detection of previous SARS-CoV-2 infection in key workers: test accuracy study	BMJ (Test Accuracy Study)	<ul style="list-style-type: none"> 2,847 frontline workers who are PCR-positive with unknown prior infection and 1,995 pre-pandemic blood donors as study participants to measure AbC-19 sensitivity and specificity using the Roche Elecsys anti-nucleoprotein assay Test bands were noted to be weak. For known positive and negative samples, sensitivity was noted at 92.5% (95% CI 88.8% to 95.1%) and specificity noted at 97.9% (95% CI, 97.2% to 96.5%). With the immunoassay reference standard, 94.2% (95%CI, 90.7% to 96.5%) sensitivity was noted among PCR confirmed and 84.7% (95%CI, 80.6% to 88.1%) among those with antibodies. AbC-19 sensitivity was higher in PCR confirmed SARS-CoV-2 cases owing to spectrum bias noting that one in five of key workers positive with AbC-19 are false positives

Evidence on Medical & Surgical Procedures

Unified COVID-19 Algorithm (7 Nov 2020): <https://www.psmid.org/unified-covid-19-algorithms/>

Date	Author/s	Title	Journal/ Article Type	Summary
11 Nov 2020	HIQA	Convalescent plasma for the treatment of COVID-19	HIQA (Scoping Report)	<ul style="list-style-type: none"> Passive immunity may be conferred to recipients of convalescent plasma from patients who've recovered from COVID-19 Limited data on efficiency has been noted on the medical approach Transfusion-related adverse events are low based on safety data

Date	Author/s	Title	Journal/ Article Type	Summary
3 Nov 2020	Mahalingasiva m, et.al.	COVID-19 and kidney transplantation: A systematic review	Kidney Int Rep (Systematic Review)	<ul style="list-style-type: none"> • Literature searches performed in April and August 2020 yielded a set of included studies which followed at least 20 kidney transplant patients • 20 studies included in the narrative coming from countries like France, Italy, Spain, Turkey, UK, and USA • The Newcastle-Ottawa Quality Assessment Scale was used to assess the studies showing weakness in control group selection and insufficient control of confounding factors • In-patient kidney transplant patient with concurrent COVID-19 are at a high risk of death
Updated 11 Nov 2020				

Evidence on Traditional Medicine

Date	Author/s	Title	Journal/ Article Type	Summary
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Evidence on Preventive & Promotive Health

Date	Author/s	Title	Journal/ Article Type	Summary
12 Nov 2020	Rothe, et.al.	<u>A systematic review of mask disinfection and reuse for SARS-CoV-2</u>	MedXRiv (Systematic Review)	<ul style="list-style-type: none">• 58 mask disinfection and reuse studies were included where majority involving N95 masks.• None of the disinfection methods consistently removed >3 log reduction of the SARS-CoV-2 virus• However, >3 log reductions can be achieved with appropriate concentrations and contact times with Ethanol, Hydrogen peroxide, and peracetic acid; radiation (PX-UV, UVGI0, and thermal (autoclaving and heat).• Hydrogen peroxide, heat, and UV-GI shows potential in allowing mask reuse without mask failures