Weekly Evidence Report

Health Technology Assessment Philippines

24 to 30 APRIL 2021

Overview

The following report presents summaries of evidence the Department of Health (DOH) - Health Technology Assessment (HTA) Unit reviewed for the period of 24 to 30 April 2021. The HTA Unit reviewed a total of 14 studies for the said period.

Evidence includes 4 studies on Epidemiology; 2 study on Transmission; 1 study on Drugs; 4 studies on Vaccines, 2 studies on Equipment and Devices; 0 studies on Medical and Surgical Procedures; 1 study on Traditional Medicine; and 0 studies on Preventive & Promotive Health.

The following report notes that 8 studies have not been peer-reviewed, each highlighted accordingly.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: <u>https://www.doh.gov.ph/covid19tracker</u> Local COVID-19 Case Tracker: <u>https://www.doh.gov.ph/covid-19/case-tracker</u>

Date	Author/s	Title	Journal/ Article Type	Summary
XX Apr 2021	WHO	Coronavirus Disease 2019 (COVID-19) External Situation Report	WHO (Situation Report)	 Southeast Asian region still reports increases in cases and death incidences with India increasing the number of global cases (38%) In the Western pacific region, a decrease of 10% in deaths were noted in the past week while an increase of 3% in cases were noted.
26 Apr 2021	ASEAN Biodiaspora Virtual Center	Risk Assessment for International Dissemination of COVID-19 to the ASEAN Region	ASEAN Biodiaspora Virtual Center (Risk Assessment)	 An added 5 million cases were noted this week totaling to 148 million cases and 3.1 million deaths due to COVID-19 Laos experiences its second wave and has thus conducted testing and treatment free of charge for locals and foreigners in the country
24 Apr 2021	Smith, MP	Estimating the total morbidity burden of COVID-19	MedRxiv (Modeling Study)	 Healthy life years lost per COVID-19 case were conducted modeled as Chronic Fatigue Syndrome A range of 0.92 to 5.71 were noted The young and females carried larger shares of total morbidity at higher symptom severities Acute mortality contributes less compared to post-COVID
29 Apr 2021	Brum, E. et al	Surging COVID-19 in Bangladesh driven by B.1.351 variant	MedRxiv (Epidemiologic Study)	 B.1351 variant was seen to cause reinfections in individuals who have recovered from the disease with previously circulating lineages The ChAdOx1-nCoV-19 vaccine having been found to have no efficacy against the variant, was given to 4% of the population and are expected to have only a small impact in reducing severe disease in this wave in the country

Evidence on Vulnerable Population Epidemiology

Date	Author/s	Title	Journal/ Article Type	Summary

Evidence on Transmission

Date	Author/s	Title	Journal/ Article Type	Summary
29 Apr 2021	Vist Gunn, E., et al	Incidence and severe outcomes from COVID-19 among immigrant and minority ethnic groups and among groups of different socio-economic status: A systematic review	NIPH (Systematic review)	 12 studies were utilized coming from Norway (data up to November 2020), Denmark (data up to September 2020), and Sweden (data up to May 2020) People of non-Western origin were noted to have more COVID-19 related hospital admissions in Norway and Denmark while in Sweden, it were the unemployed population In Sweden, the risk of dying due to COVID-19 were higher among the low or middle-income citizens
15 Apr 2021	Barcelos, IDE. et al	Vertical Transmission of SARS-CoV-2: A Systematic Review	RBGO (Systematic Review)	 177 records were evaluated with 9 suspected cases and one case with sufficient evidence of vertical transmission The risk of vertical transmission for SARS-CoV-2 is probably low

Evidence on Drugs

Date	Author/s	Title	Journal/ Article Type	Summary
23 Apr 2021	Remillard, L., et al	Chloroquine or Hydroxychloroquine to Prevent or Treat COVID-19	CADTH (Technological Review)	 17 studies were included in the review with 14 as treatment trials and 3 as prevention trials Limited data on clinical efficacy and safety on the drug's use for COVID-19 were found

Evidence on Vaccines

Link to HTA Living Database: <u>https://bit.ly/3gOOSmG</u> LAST UPDATE: 19 MARCH 2021

NYT Coronavirus Vaccine Tracker: <u>https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html</u>

Bloomberg Vaccine Tracker: <u>https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/</u>

London School of Hygiene and Tropical Medicine Vaccine Trial Mapper and Tracker: <u>https://vac-lshtm.shinyapps.io/ncov_vaccine_landscape/</u>

ACIP Files:

https://drive.google.com/drive/u/0/folders/1v-jd66qllxnUkfzXWKqiD0mkVvqy_VvJ

Date	Author/s	Title	Journal/ Article Type	Summary
24 Apr 2021	Goldberg, Y., et al	Protection of previous SARS-CoV-2 infection is similar to that of BNT 162b2 vaccine protection: A three-month nationwide experience from Israel	MedRxiv (Cohort study)	 An overall efficacy for documented infection of 92.8% (95%CI: 92.6-93.0); hospitalization of 94.2% (95% CIL 93.6-94.7); severe illness of 94.4% (95% CI: 93.6-95.0); and death of 93.7% (95% CI: 92.5-94.7) were noted For those with prior SARS-CoV-2 infection, the overall protection are the following: 94.8% (95% CI: 94.4-95.1), hospitalization 94.1% (95% CI: 91.9-95.7), and severe illness 96.4% (95% CI: 92.5-98.3) were noted
16 Apr 2021	Kustin, A, et al	Evidence for increased breakthrough rates of SARS-CoV-2 variants of concern in BNT162b2 mRNA vaccinated individuals	MedRxiv (Evidence Review)	 An 8:1 odds ratio in vaccines that tested positive at least 7 days after dose 2 were noted to be infected with B.1.351 compared to unvaccinated individuals A 26:10 odds ratio is noted in those who tested positive with the B.1.1.7 variant 14 days after dose one and 7 days after dose two Reduced vaccine effectiveness against the two VOCs tested

Date	Author/s	Title	Journal/ Article Type	Summary
29 Apr 2021	Low, JM, et al	BNT162b2 vaccination induces SARS-CoV-2 specific antibody secretion into human milk with minimal transfer of vaccine mRNA	MedRxiv (Prospective Cohort Study)	 The GIFT-2 study which recruited lactating mothers from the 5th to 9th February 2021 in Singapore with a mean age of 32.5 years old The sharpest rise in antibody production was three days to a week after dose two of the vaccine. Infants had no adverse events up to 28 days of ingesting post-vaccination breast milk
29 Apr 2021	Fluckiger, AC, et al	An enveloped virus-like particle vaccine expressing a stabilized perfusion form of the SARS-CoV-2 spike protein elicits potent immunity after a single dose	MedRxiv (Experimenta I Study)	 The candidate studied was the VBI-2902a (perfusion S eLVP with aluminum phosphate) The enveloped virus-like particles (eVLPs), after one dose, induced IgG2 and igG1 isotypes and antibody binding and neutralization titers were undiminished for up to three months

Evidence on Equipment & Devices

Date	Author/s	Title	Journal/ Article Type	Summary
25 Apr 2021	Meyer, CT & Kra;j, JM	Bayesian, Universal COVID Testing	MedRxiv (Modeling Study)	 The relationship between test performance and demographic has been noted in the study By using Bayesian statistics, it can be noted that a non-linear increase in the odds of a positive test becoming a false negative
16 Apr 2021	MaHTAS	Puri Band Attached Thermometer	MaHTAS (Rapid Review)	 Medisafe Technologies noted that the thermometer makes use of thermochemical cells (dots) that change color depending to body temperature The search done on scientific databases did not yield evidence

Evidence on Traditional Medicine

Date	Author/s	Title	Journal/ Article Type	Summary
28 Apr 2021	Shiri, AH, et al	<u>The herbal</u> <u>combination of</u> <u>Sugarcane, Black</u> <u>Myrobalan, and mastic</u> <u>as a supplementary</u> <u>treatment for</u> <u>COVID-19: a</u> <u>randomized clinical</u> <u>trial</u>	MedRxiv (Clinical Trial)	 Patients in a hospital in Iran were included in the study from May to July 2020. 37 participants and 35 participants were included in the intervention and control group, respectively The control group had lower C-reactive protein during 7 days (p<0.05) but patients in the herbal supplement group had less hospitalization days at 4.12 days compared to the control with 8.37 days (p=0.001)

Evidence on Preventive & Promotive Health

Evidence on Screening

Date	Author/s	Title	Journal/ Article Type	Summary

Evidence on Personal Measures

Date	Author/s	Title	Journal/ Article Type	Summary

Evidence on Community Measures

Date	Author/s	Title	Journal/ Article Type	Summary