

Weekly Evidence Report



Health Technology Assessment Philippines

24 to 30 July 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 July 2021. The HTA Unit reviewed a total of 15 studies for the said period.

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

The following report notes that there is no study that has not been peer-reviewed.



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
28 July 2021	ASEAN Biodiaspora Virtual Center	COVID-19 Situational Report in the ASEAN Region	Situation Overview	<ul style="list-style-type: none"> Malaysia reported 16,117 new cases bringing the total number of COVID-19 cases of the country to 1.0 million as of July 27. More than 10 million residents of Ho Chi Minh City will be placed under a strict overnight curfew beginning Monday (July 26), an unprecedented move to curb infections as Vietnam battles a rapid COVID-19 surge due to the Delta variant. Thailand reported 14,150 new cases bringing the total number of COVID-19 cases of the country to 526,808 as of July 27. 6,897,864 confirmed cases and 136,563 deaths attributed to COVID-19 have been reported in the ASEAN region.
27 July 2021	World Health Organization	Weekly epidemiological update on COVID-19 - 27 July 2021	Situation Overview	<ul style="list-style-type: none"> The global number of new cases reported last week (19-25 July 2021) was over 3.8 million, an 8% increase as compared to the previous week. An average of around 540,000 cases were reported each day over the past week as compared to 490,000 cases reported daily the week before. This increasing trend is largely attributed to substantial increases in the Region of the Americas and the Western Pacific Region. The number of deaths reported this week increased sharply at 21% with over 69,000 deaths as compared to the previous week. The cumulative number of cases and deaths reported globally is almost 194 million and over 4 million respectively
14 July 2021	European Centre for Disease Prevention and Control	Data on the daily number of new reported COVID-19 cases and deaths by EU/EEA country	ECDC Data Set	<ul style="list-style-type: none"> The European Medicines Agency (EMA) and the ECDC tallied a total of 5,831,333 new cases and 110,682 total deaths from 24 to 30 July 2021 in EU/EEA countries.

Evidence on Transmission

Date	Author/s	Title	Journal/ Article Type	Summary
28 July 2021	ASEAN Biodiaspora Virtual Center	Interim Public Health Recommendations for Fully Vaccinated People	Interim Guidance	<ul style="list-style-type: none"> Added a recommendation for fully vaccinated people to wear a mask in public indoor settings in areas of substantial or high transmission. Added information that fully vaccinated people might choose to wear a mask regardless of the level of transmission, particularly if they are immunocompromised or at increased risk for severe disease from COVID-19, or if they have someone in their household who is immunocompromised, at increased risk of severe disease or not fully vaccinated.

Evidence on Drugs

Date	Author/s	Title	Journal/ Article Type	Summary
28 July 2021	Popp, M., Stegemann, M., Metzendorf, M. I., Gould, S., Kranke, P., Meybohm, P., Skoetz, N., & Weibel, S.	Ivermectin for preventing and treating COVID-19	Systematic Review and Meta-analysis	<ul style="list-style-type: none"> RCTs assigning patients to ivermectin, no treatment, standard of care, placebo, or another proven intervention for prevention and treatment of people with confirmed COVID-19 were included. Based on the current very low- to low-certainty evidence, we are uncertain about the efficacy and safety of ivermectin used to treat or prevent COVID-19. The completed studies are small and few are considered high quality.
29 July 2021	Thiruchelvam, K., Kow, C. S., Hadi, M. A., & Hasan, S. S.	The use of remdesivir for the management of patients with moderate-to-severe COVID-19: a systematic review	Systematic Review	<ul style="list-style-type: none"> The paper systematically reviewed 11 studies (RCTs, compassionate use studies, and case reports) on the use of remdesivir for patients with moderate or severe COVID-19. Given the current evidence, there is insufficient data to confidently recommend the use of remdesivir alone for the treatment of adult hospitalized patients with moderate-to-severe COVID-19. However, remdesivir may be considered along with an anti-inflammatory agent in patients with pneumonia, on oxygen support, provided there is close monitoring of clinical and laboratory parameters and adverse events.

Evidence on Vaccines

NYT Coronavirus Vaccine Tracker:

<https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html>

Bloomberg Vaccine Tracker:

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

London School of Hygiene and Tropical Medicine Vaccine Trial Mapper and Tracker:

https://vac-lshtm.shinyapps.io/ncov_vaccine_landscape/

ACIP Files:

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

Date	Author/s	Title	Journal/ Article Type	Summary
30 July 2021	World Health Organization	Interim recommendations for use of the ChAdOx1-S [recombinant] vaccine against COVID-19 (AstraZeneca COVID-19 vaccine AZD1222 Vaxzevria™, SII COVISHIELD™)	Interim Guidance	<ul style="list-style-type: none"> This section was updated based on new preliminary data using heterologous schedules (i.e. ChAdOx1-S [recombinant] vaccine followed by an mRNA vaccine). <i>Studies to date show that immune responses after a first dose of ChAdOx1-S products followed by an mRNA vaccine show higher neutralising antibody levels and higher T cell mediated immune responses in comparison with two doses of the ChAdOx1-S products and similar levels to those of two mRNA vaccines and was better than a first dose mRNA vaccine followed by ChAdOx1-S. Results from an observational study using ChAdOx1-S products followed by mRNA-1273, also showed an increased but acceptable reactogenicity. While these studies are encouraging, they require cautious interpretation given the limited sample size and lack of follow up especially related to safety data.</i> This section (Considerations for deferring the second dose in settings with limited vaccine supply) has been added to provide guidance to Member States facing vaccine supply shortages which result in an inability to readily administer second doses To reflect updates in data and insights with regards to the use of COVID-19 vaccines in pregnancy and breastfeeding women. To reflect updated data related to TTS and GBS related to ChAdOx1-S [recombinant] vaccine.

Evidence on Equipment & Devices

Date	Author/s	Title	Journal/ Article Type	Summary
24 July 2021	Vilborn, P., & Bernitz, H.	A systematic review of 3D scanners and computer assisted analyzes of bite marks: searching for improved analysis methods during the Covid-19 pandemic	Systematic Review	<ul style="list-style-type: none"> A systematic review of the literature using keywords like “human bite mark”, “bite mark analyzes”, “3D analyzes”, “3D scanning”, “forensic odontology”, and “forensic dentistry” was performed in three scientific databases: MEDLINEOvid®, Pubmed® and Google Scholar. The initial search yielded 263 full-text articles, of which 15 were considered eligible and current within the last 10 years. 3D scanners and computer-assisted human bite mark analyzes showed potential advantages and can be effectively used in forensic odontology on skin and inanimate objects.

Evidence on Medical and Surgical Procedures

Date	Author/s	Title	Journal/ Article Type	Summary
28 July 2021	Barot, N., Batra, K., Zhang, J., Klem, M. L., Castellano, J., Gonzalez-Martinez, J., & Bagic, A.	Surgical outcomes between temporal, extratemporal epilepsies and hypothalamic hamartoma: systematic review and meta-analysis of MRI-guided laser interstitial thermal therapy for drug-resistant epilepsy	Systematic Review and Meta-Analysis	<ul style="list-style-type: none"> Twenty-eight studies that included a total of 559 patients with DRE were identified. MRgLITT is an effective and safe intervention for DRE with different disease aetiologies. The seizure freedom outcome is overall comparable in between extratemporal and temporal lobe epilepsy; and highest with HH.
26 July 2021	Wright, K., Chaker, L., Pacione, D., Sam, K., Feelders, R., Xia, Y., & Agrawal, N.	Determinants of surgical remission in prolactinomas: a systematic review and meta-analysis	Systematic Review and Meta-Analysis	<ul style="list-style-type: none"> PubMed was searched to identify eligible studies reporting postoperative remission in patients treated with transsphenoidal surgery for prolactinoma. Thirty-five studies were included. Transsphenoidal surgery for prolactinomas may be particularly effective in small, non-invasive, treatment naive tumors and may provide a viable first-line alternative to dopamine agonist therapy in such patients.

Evidence on Traditional Medicine

Date	Author/s	Title	Journal/ Article Type	Summary
29 July 2021	Ghasemian, R., Shamshirian, A., Heydari, K., Malekan, M., Alizadeh-Navaei, R., Ebrahimzadeh, M. A., Ebrahimi Warkiani, M., Jafarpour, H., Razavi Bazaz, S., Rezaei Shahmirzadi, A., Khodabandeh, M., Seyfari, B., Motamedzadeh, A., Dadgostar, E., Aalinezhad, M., Sedaghat, M., Razzaghi, N., Zarandi, B., Asadi, A., Yaghoubi Naei, V., ... Shamshirian, D.	The Role of Vitamin D in the Age of COVID-19: A Systematic Review and Meta-Analysis	Systematic Review and Meta-analysis	<ul style="list-style-type: none"> • A systematic search was performed in PubMed, Scopus, Embase, and Web of Science up to December 18, 2020. Studies focused on the role of vitamin D in confirmed COVID-19 patients were entered into the systematic review. • 23 studies containing 11,901 participants entered into the meta-analysis. • This study found that most of the COVID-19 patients were suffering from vitamin D deficiency/insufficiency. Also, there is about three times higher chance of getting infected with SARS-CoV-2 among vitamin D deficient individuals and about 5 times higher probability of developing the severe disease in vitamin D deficient patients. Vitamin D deficiency showed no significant association with mortality rates in this population.
26 July 2021	Szarpak, L., Rafique, Z., Gasecka, A., Chirico, F., Gawel, W., Hernik, J., Kaminska, H., Filipiak, K. J., Jaguszewski, M. J., & Szarpak, L.	A systematic review and meta-analysis of effect of vitamin D levels on the incidence of COVID-19	Systematic Review and Meta-analysis	<ul style="list-style-type: none"> • PubMed, EMBASE, Web of Science, Cochrane Collaboration Databases and Scopus electronic databases were searched for relevant studies from database inception to May 10th, 2021. • 13 studies providing data for 14,485 participants met the inclusion criteria. • Low serum vitamin D levels are statistically significantly associated with the risk of COVID-19 infection. Supplementation of vitamin D especially in the deficiency risk groups is indicated.

Evidence on Preventive & Promotive Health

Evidence on Screening

Date	Author/s	Title	Journal/ Article Type	Summary
30 July 2021	Ruco, A., Dossa, F., Tinmouth, J., Llovet, D., Jacobson, J., Kishibe, T., & Baxter, N.	Social Media and mHealth Technology for Cancer Screening: Systematic Review and Meta-analysis	Systematic Review and Meta-analysis	<ul style="list-style-type: none"> • RCTs and quasi-experimental studies of social media and mHealth interventions promoting cancer screening (breast, cervical, colorectal, lung, and prostate cancers) in adults were searched in MEDLINE, Embase, PsycINFO, Scopus, CINAHL, Cochrane Central Register of Controlled Trials, and Communication & Mass Media Complete from January 1, 2000, to July 17, 2020. • They included 39 studies (35 mHealth and 4 social media). • Screening programs should consider mHealth interventions because of their promising role in promoting cancer screening participation. Given the limited number of studies identified, further research is needed for social media interventions.

Evidence on Personal Measures

Date	Author/s	Title	Journal/ Article Type	Summary
26 July 2021	Edwards, T., Michelsen, A. S., Fakolade, A. O., Dalgas, U., & Pilutti, L. A.	Exercise training improves participation in persons with multiple sclerosis: A systematic review and meta-analysis	Systematic Review and Meta-analysis	<ul style="list-style-type: none"> • A search of 6 electronic databases (CINAHL, Sport Discuss, EMBASE, MEDLINE, Cochrane Central, Scopus) was conducted to identify controlled and non-controlled trials involving exercise training and participation in persons with MS. • 49 articles involving controlled and non-controlled exercise trials were included in the systematic review of outcome measures. • Exercise training has a positive effect on outcomes that capture participation, providing further evidence for the role of exercise training in promoting and maintaining engagement in everyday life. It should be noted that these effects should be interpreted with caution at this stage.

Evidence on Preventive & Promotive Health

Evidence on Community Measures

Date	Author/s	Title	Journal/ Article Type	Summary
24 July 2021	Bou-Karroum, L., Khabsa, J., Jabbour, M., Hilal, N., Haidar, Z., Abi Khalil, P., Khalek, R. A., Assaf, J., Honein-AbouHaidar, G., Samra, C. A., Hneiny, L., Al-Awlaqi, S., Hanefeld, J., El-Jardali, F., Akl, E. A., & Bcheraoui, C. E.	Public Health Effects of Travel-Related Policies on the COVID-19 Pandemic: A Mixed-Methods Systematic Review	Mixed-Methods Systematic Review	<ul style="list-style-type: none"> For the policy mapping, we searched websites of relevant government bodies and used data from the Oxford COVID-19 Government Response Tracker for a convenient sample of 31 countries across different regions. For the systematic review, we searched Medline (Ovid), PubMed, EMBASE, the Cochrane Central Register of Controlled Trials and COVID-19 specific databases. We included randomized controlled trial, non-randomized studies, modeling studies, and qualitative studies. The systematic search identified 69 eligible studies, including 50 modeling studies Most countries adopted full or partial border closure in response to COVID-19 in 2020. Evidence suggests positive effects on controlling the COVID-19 pandemic for border closure (particularly when implemented early), as well as quarantine of travelers (particularly with higher levels of compliance). While these positive effects are enhanced when implemented in combination with other public health measures, they are associated with concerns by the public regarding some unintended effects.