Weekly Evidence Report

Health Technology Assessment Philippines

07 February 2022 to 13 February 2022

Overview

The following report presents summaries of evidence the Department of Health (DOH) - Health Technology Assessment (HTA) Unit reviewed for the period of 07 to 13 February 2022. The HTA Unit reviewed a total of 9 studies for the said period.

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

Sections

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
08 Feb 2022	WHO Global	Weekly epidemiological update on COVID-19 - 8 February 2022	WHO Global (Situation Report)	• Globally, during the week of 31 January to 6 February 2022, the number of new COVID-19 cases decreased by 17% as compared to the number reported during the previous week, while the number of new deaths increased by 7% • As of 6 February 2022, over 392 million confirmed cases and over 5.7 million deaths have been reported globally.
			WHO Global (Situation Report – *Regional Updates)*	• The Eastern Mediterranean Region reported an increase of 36% in the number of new weekly cases while all other regions reported decreases: The Region of the Americas (36%), the South-East Asia Region (32%), the African Region (22%), the Western Pacific Region (8%) and the European Region (7%). • The number of new weekly deaths continued to increase in the South-East Asia (67%) and Eastern Mediterranean Regions (45%), while the number remained similar to that of the previous week in the Region of the Americas and the European Region and decreased in the African (14%) and Western Pacific Regions (5%).
			WHO Global (Situation Report – *SARS-CoV-2 variants of interest and variants of concern)*	• The current global epidemiology of SARS-CoV-2 is characterized by the continued rapid global spread of the Omicron variant. All other variants, including VOCs (Alpha, Beta, Gamma and Delta) and VOIs (Lambda and Mu) continue to decline in all six WHO regions. • Among the 426 363 sequences uploaded to GISAID with specimens collected in the last 30 days , 412 265 (96.7%) were Omicron, 13 972 (3.3%) were Delta, two (<0.1%) were Gamma, and two (<0.1%) were Alpha. • There were no sequences reported for any other variant, including for VOIs Mu and Lambda. To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting. .

Evidence on Epidemiology (continued)

Date	Author/s	Title	Journal/ Article Type	Summary
09 Feb 2022	Ruwandi M Kariyawasam et. al	Defining COVID-19 associated pulmonary aspergillosis: systematic review and meta-analysis	Systematic Review	• 51 studies were included. Among 3,297 COVID-19 patients in ICU cohort studies, 313 were diagnosed with CAPA (prevalence 10%, 95% confidence interval 8-13%). 277 patients had patient-level data allowing reclassification. . • Patients were diagnosed after a median of 8 days (interquartile range 5-14) in ICUs. Tracheobronchitis occurred in 3% of patients examined with bronchoscopy. The mortality rate was high (59.2%). Applying CAPA research definitions did not strengthen the association between mould-active antifungals and survival. • The reported prevalence of CAPA is significant, but may be exaggerated by non-standard definitions.

Evidence on Epidemiology (continued)

Evidence on Vulnerable Population Epidemiology

Date	Author/s	Title	Journal/ Article Type	Summary
07 Feb 2022	Shuting Han et. al	Impact of cancer diagnoses on the outcomes of patients with COVID-19: a systematic review and meta-analysis	Meta-Analysis Systematic Review	• Studies with clinical outcomes of at least 10 COVID-19 patients and at least one with a diagnosis of cancer were included • They identified 57 case series (63 413 patients), with 230 patients with cancer with individual patient data (IPD). • The presence of lung cancer and stage IV cancer did not result in significantly increased RR of severe outcome. Among the available IPD, only age and gender were associated with severe outcomes. • Patients with cancer were at a higher risk of severe and death outcomes from COVID-19 infection as compared with general COVID-19 populations. Limitations of this study include publication bias. A collaborative effort is required for a more complete database.

Evidence on Transmission

Date	Author/s	Title	Journal/ Article Type	Summary
11 Feb 2022	Lori Jia et. al	The risk of COVID-19 transmission upon return to sport	Systematic review	• 10 studies were included in the final analysis, comprising over 97,000 athletes across a wide variety of sports, levels of play, and RTS settings. Of the 10 studies, eight identified low transmission rates and considered RTS to be safe/low risk. Overall, COVID-19 transmission rates were higher in athletes than in contacts, and more prevalent in the greater community than in athletes specifically. The risk of COVID-19 did not appear to be necessarily higher for athletes who played high-contact team sports, shared common facilities, or lived in communities impacted by high transmission rates, provided that rigorous COVID-19 safety and testing protocols were implemented and followed. Mask wearing and physical distancing during active play presented the greatest challenge to athletes. • Rigorous preventive and surveillance measures can mitigate the risk of COVID-19 transmission in athletes upon RTS. However, the heterogeneity of RTS playing conditions, availability of COVID-19 resources, rise of unforeseen novel variants, and undetermined long-term impact of vaccination on athletes remain a challenge to safe and effective RTS in the era of COVID-19.

Evidence on Drugs

Date	Author/s	Title	Journal/ Article Type	Summary
10 Feb 2022	Yuqin Chen et. al	Efficacy and safety of Bufei Huoxue capsules in the management of convalescent patients with COVID-19 infection: A multicentre, double-blind, and randomised controlled trial	RCT	• A total of 131 patients in the rehabilitation period of COVID-19 infection were randomly divided into a Bufei Huoxue (BFHX) group (n = 66) and a placebo group (n = 65). BFHX or placebo was given orally three times a day (1.4 g/dose) for 90 days. The primary outcomes was to evaluate improvements in exercise tolerance and imaging manifestations on chest computed tomography (CT). • After the exclusion of two patients who withdrew prior to receiving any medications, 129 patients were recruited, including 64 patients in the BFHX group and 65 patients in the placebo group. After 3 months of treatment, the BFHX group exhibited greater attenuation of pneumonia lesions on chest CT than the placebo group (P<0.05). Improvements in 6-min walk distance (6MWD) relative to baseline were also significantly better in the BFHX group than in the placebo group (P<0.01). Scores on the Fatigue Assessment Inventory (FAI) were lower in the BFHX group than in the placebo group (P<0.05). Although the rate of adverse events was higher in the BFHX group than in the placebo group (9.38% vs. 4.62%), the difference was not significant (P=0.3241). • BFHX may exert strong rehabilitative effects on physiological activity in patients recovering from COVID-19, which may in turn attenuate symptoms of fatigue and improve exercise tolerance.

Evidence on Drugs (continued)

Date	Author/s	Title	Journal/ Article Type	Summary
09 Feb 2022	Jessica Audrey, L., et al	Association Between Statin Use and Poor Outcomes in COVID-19 Patients with Diabetes Mellitus: A Systematic Review	Systematic Review	Literature search was performed from PubMed, CENTRAL, Scopus, and pre-print databases (MedRxiv and BioRxiv), searching for studies published up to 6 March 2021. Selected studies were then assessed for risk of bias with Newcastle Ottawa Scale. Four studies were included in the final analysis, all were retrospective studies. Two studies reported a decreased risk of mortality with statin use, while one study reported opposite findings. The other one did not find a significant association between statin use and poor COVID-19 outcomes. Available data suggested that statin may be safely administered in diabetic COVID-19 patients as the majority of evidence pointed out that statins may confer benefits and improve clinical outcomes in COVID-19 patients.

Evidence on Drugs (continued)

Date	Author/s	Title	Journal/ Article Type	Summary
11 Feb 2022	Guangyu Ao, et. al	Intravenous vitamin C use and risk of severity and mortality in COVID-19.	A systematic review and meta-analysis	• In this systematic review and meta-analysis, three RCTs and four observational studies were included to evaluate the role of IV-VC therapy in patients with COVID-19. The overall results indicated that patients with COVID-19 who were treated with IV-VC did not manifest signs of improved prognosis. These results are consistent with those of a recent RCT, which showed that IV-VC treatment did not reduce the mortality rate in patients with septic shock. • Respiratory failure due to ARDS is the primary cause of mortality in patients with COVID-19.22 Both cytokine storm and oxidative stress play an essential role in the progression of COVID-19 to ARDS.2 • he role of VC is limited in patients with mild to moderate COVID-19 who are unlikely to develop severe inflammation or cytokine storm. • This is the first meta-analysis focusing on IV-VC use and risk of severity and mortality in COVID-19. Pooled analyses of both unadjusted and adjusted results were analyzed. A previous meta-analysis demonstrated that regular supplementation of VC was more effective than starting it at the onset of illness in respiratory tract infections.37 In our study, most patients began IV-VC treatment after hospitalization or progressing to severe COVID-19. • This study has some inherent limitations described as follows. First, the number of eligible high-quality studies was relatively small, which may have affected the accuracy of the results. Second, despite only mild heterogeneity observed in the analysis of COVID-19 severity, the underlying clinical heterogeneity may cause a degree of statistical heterogeneity in the results. • This meta-analysis indicated that short-term IV-VC treatment did not reduce the risk of severity and mortality in patients with COVID-19.

Evidence on Vaccines

Date	Author/s	Title	Journal/ Article Type	Summary
07 Feb 2022	Chia-Wei Chu et. al	Association of COVID-19 vaccination with herpes zoster: a systematic review and meta-analysis	RCT	• Three databases, including the Cochrane Library, PubMed, and EMBASE, were searched for relevant studies before 25 December 2021 according to preliminarily determined inclusion and exclusion criteria without any language limitations. Four cohort studies were included in this systematic review and meta-analysis. • Compared with the placebo group, there was no evidence that the COVID-19 vaccination group was associated with increased incidence of herpes zoster (Risk ratio [RR]: 1.06; 95% confidence interval [CI]: 0.91 to 1.24). There is no evidence that the COVID-19 vaccination from Moderna is associated with the incidence of herpes zoster compared with vaccination from Pfizer (RR: 0.20; 95% CI: 0.01 to 2.99). • To date, there is no evidence of an association between covid-19 vaccination and herpes zoster.

Evidence on Vaccines (continued)

Date	Author/s	Title	Journal/ Article Type	Summary
09 Feb 2022	Gianluca Avallone et. al	SARS-CoV-2 vaccine-related cutaneous manifestations	Systematic review	• A total of 1549 records were initially identified through a literature search, 477 of which were duplicates. After screening for eligibility and inclusion criteria, All the studies included were rated as level 4 or 5 evidence for clinical research as detailed in the Oxford Centre for Evidence-Based Medicine 2011 guidelines. 235 A total of 4649 patients with SARS-CoV-2 vaccine-related dermatological manifestations were gathered. • Some patients experienced more than one cutaneous manifestation, either after the first or the second dose. Various cutaneous manifestations have been described, for a total of 5941 cases. • Local injection-site reactions (immediate or delayed) (n = 2023) have been the most common SARS-CoV-2 vaccine-related dermatological manifestations. Notably, Moderna seemed to be the vaccine relatively most frequently leading to this type of reaction, having been administered in a total of 1607 (79.43%) cases of out 2023 reporting it. Reasons why the Moderna vaccine more frequently induced skin-related manifestations compared to the Pfizer-BioNTech mRNA vaccine are unknown, and further studies are needed to clarify it • We conducted a comprehensive systematic review on SARS-CoV-2 vaccine-related dermatological manifestations, collecting up to 5941 total cases of adverse reaction following vaccine administration. • With the introduction of large-scale vaccination programs, patients should be monitored for cutaneous manifestations following vaccine administration, and dermatological evaluation should be offered, when needed.

Evidence on Equipment & Devices

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Evidence on Traditional Medicine

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Evidence on Preventive & Promotive Health

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Evidence on Medical and Surgical Procedures

Date	Author/s	Title	Journal/ Article Type	Summary
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Evidence on Traditional Medicine

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