Weekly Evidence Report

Health Technology Assessment Philippines

04 April - 10 April 2022

Overview

The following report presents summaries of evidence the Department of Health (DOH) - Health Technology Assessment (HTA) Division reviewed for the period of 28 March-03 April 2022. The HTA Division reviewed a total of **10 studies** for the said period.

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

The following report notes that 0 studies have not been peer-reviewed, each highlighted accordingly.



Sections

Epidemiology	
Transmission	
Drugs	
Vaccines	
Equipment & Devices	
Medical & Surgical Procedures	
Traditional Medicine	
Preventive & Promotive Health	
Other Health Technologies	

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
05 Apr 2022	WHO Global	<u>COVID-19</u> <u>Weekly</u> <u>Epidemiological</u> <u>Update - 29</u> <u>March 2022</u>	WHO Global (COVID-19 Weekly Epidemiologic al Update)	 The number of new COVID-19 cases during the week of 28 March through 3 April 2022 observed a decline (16%) for a second consecutive week. During this same period, the number of weekly deaths had a 43% decrease due to an observed artificial spike in deaths, when compared to the previous week. As of 3 April 2022, about 489 million cases and over 6 million deaths were reported globally. The trends reported above should be interpreted with caution as several countries are progressively changing their COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.
7 Apr 2022	European Centre for Disease Prevention and Control (ECDC)	<u>Country</u> overview report: week 12 2022	Situation Report	 At the end of week 13 (ending at Sunday, 3 April), the epidemiological situation in the EU/EEA observed a slowing down from the recent resurgence, which observes that the sustained transmission among older populations that may not translate into rates of severe disease as significant as those seen during the initial Omicron wave. This is despite the continued expansion of BA.2 and the widespread lifting of public health measures. The estimated distribution (median and range of values from 22 countries for weeks 11-12, 14 March to 27 March 2022) of variants of concern (VOCs) was 100.0% (63.9–100.0%) for B.1.1.529 (Omicron) and 0.0% (0.0–0.3%, 47 detections) for B.1.617.2 (Delta).

Evidence on Transmission

Date	Author/s	Title	Journal/ Article Type	Summary
07 Apr 2022	Chen et al.	Measurement of contagion spatial spread probability in public places: A case study on COVID-19	Applied Geography/Case study	 This study proposed a new spatial probability algorithm method of epidemic infection using improved Wasserstein distance algorithm and Monte Carlo simulation. Based on the detailed geographic data of COVID-19 cases and public places of Wuhan, public buildings such as restaurants and hospitals in the city are more likely to be the public places of COVID-19 spread, with a probability of more than 95 percent.
Evidence	e on Drugs			
Date	Author/ s	Title	Journal/ Article Type	Summary

Evidence on Vaccines

Bloomberg Vaccine Tracker: https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/ WHO COVID-19 Vaccine Tracker: https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines

Date	Author/s	Title	Journal/ Article Type	Sum	mary
04 Apr 2022	Celeste et al	Humoral response to Coronavirus Disease-19 vaccines is dependent on dosage and timing of rituximab in patients with rheumatoid arthritis	Rheumatology (Oxford)/Single-center observational study	•	The study investigated the humoral response to vaccines in rheumatoid arthritis (RA) patients treated with rituximab. After two-dose vaccination, the response rate was significantly better for patients receiving 200 mg ($n = 31, 45\%$) rituximab compared with 1000 mg ($n = 98, 26\%$; OR 3.07, 95% Cl 1.14–8.27,). Increased time between latest rituximab infusion and complete vaccination and 200 mg as latest dose were associated with a better response to COVID-19 vaccination which can be considered when trying to increase vaccine response after rituximab in RA patients
08 Apr 2022	Block et al.	Cardiac Complications After SARS-CoV-2 Infection and mRNA COVID-19 Vaccination - PCORnet, United States, January 2021-January 2022	Morbidity and Mortality Weekly Reports (MMWR)/Cross-sectio nal study	•	Using electronic health record (EHR) data from 40 U.S. health care systems from 1 January 2021 - 31 January 2022, incidences of cardiac outcomes such as myocarditis; myocarditis or pericarditis; and myocarditis, pericarditis, or multisystem inflammatory syndrome (MIS) among individuals aged >5 who had SARS-CoV-2 infection The incidence of cardiac outcomes after mRNA vaccination was evidently higher after SARS-CoV-2 infection than after first, second, or unspecified dose of mRNA vaccination for all other groups by sex and age (RR 2.2 -115.2). The findings support the continued use of mRNA COVID-19 vaccines among all eligible persons aged 5 years old and above.
09 Apr 2022	Schell et al	Humoral Immunogenicity of 3 COVID-19 Messenger RNA Vaccine Doses in Patients With Inflammatory Bowel Disease	Inflammatory Bowel Diseases//Multicenter prospective nonrandomized study	•	A total of 139 patients with inflammatory bowel disease (IBD) displayed humoral immune response with a third COVID-19 messenger RNA vaccine. The median antibody concentrations were higher after the third those than after the completion of two-dose series only.

Evidence on	Equipment	and	Devices
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Date	Author/s	Title	Journal/ Article Type	Summary
04 Apr 2022	Anagoni et al.	Effect of delay in processing and storage temperature on diagnosis of SARS-CoV-2 by RTPCR testing	Indian Journal of Medical Microbiology/ Case-Control Observational Study	• This study was conducted to evaluate the effect of sample storage conditions at different temperatures on the results of RT-PCR test. A total of 126 samples (45.8%) tested positive while 149 tested negative (N=275). All samples were aliquoted into two, stored at 4C and room temperature which were tested by RT-PCR every 24 hours up to five days.There was no significant difference between the two temperature setting.
09 Apr 2022	Denzler et al.	Rapid comparative evaluation of SARS-CoV-2 rapid point-of-care antigen tests	Infection/Techni cal report	 Among 32 SARS-CoV-2 antigen point-of-care tests (AgPOCTs) tested, the study observe sensitivity differences across a broad range of viral loads (9.8 × 108 to 1.8 × 105 SARS-CoV-2 genome copies per ml). 23 AgPOCTs detected the Ct25 test sample (1.6 × 106 copies/ml), while only five tests detected the Ct28 test sample (1.8 × 105 copies/ml). In the low-range of analytical sensitivity, we found three saliva spit tests only delivering positive results for the Ct21 sample (2.7 × 107 copies/ml).

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

Evidence on Preventive & Promotive Health

Date	Author/s	Title	Journal/ Article Type	Summary
04 Apr 2022	Abuhammad et al	Depression, stress, anxiety among jordanian people during COVID-19 pandemic: A survey-based study	Informatics in Medicine Unlocked/ Cross-sectional study	 Among Jordanians (n=1587), the total Depression Anxiety Stress Scales (DASS) score was, 32.7 ± 0.67. The DASS scale showed significantly high scores for stress, anxiety, and depression in the groups that perceived a moderate-high probability of infection with COVID-19 (P < 0.05). The stress score was greater (P < 0.001) in the men (11.39 ± 0.469) compared to the women (10.74 ± 0.33). Many Jordanians experienced moderate to severe depression, stress and anxiety during the COVID-19 which was relatively associated with the sex and age of the respondents.
04 Apr 2022	Abdeen	<u>A web-based</u> <u>cross-sectional</u> <u>study assessing the</u> <u>impact of COVID-19</u> <u>on the mental health</u> <u>of radiology staff in</u> <u>Saudi Arabia</u>	PLoS Onet/ Cross-sectional study	 A total of 168 radiology staff in Saudi Arabia participated in an online survey. The results indicated that 53.05% and 57.14% of the participants were experiencing mild to severe symptoms of anxiety and depression, respectively. The findings also indicate that more than 70% of the radiology staff respondents were concerned about the insufficient protective measures and the risk of infection

Evidence on Medical and Surgical Procedures

Date	Author/s	Title	Journal/ Article Type	Summary
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Evidence on Other Health Technologies

Date	Author/s	Title	Journal/ Article Type	Summary
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