

Weekly Evidence Report



Health Technology Assessment Philippines

21 - 27 March 2022

Overview

The following report presents summaries of evidence the Department of Health (DOH) - Health Technology Assessment (HTA) Division reviewed for the period of 21-27 March 2022. The HTA Division reviewed a total of **9 studies** for the said period.

Evidence includes **2** studies on Epidemiology; **0** studies on Transmission; **1** study on Drugs; **2** studies on Vaccines, **2** studies on Equipment and Devices; **0** study on Medical and Surgical Procedures; **1** study on Traditional Medicine; **1** 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The following report notes that 0 studies have not been peer-reviewed, each highlighted accordingly.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: <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
22 Mar 2022	WHO Global	Weekly epidemiological update on COVID-19 - 22 March 2022	<i>WHO Global (Emergency Situation Updates)</i>	<ul style="list-style-type: none"> After a consistent decrease since the end of January 2022, the number of new weekly cases rose for a second consecutive week, with a 7% increase reported during the week of 14 through 20 March 2022, as compared to the previous week. The number of new deaths has continued a decreasing trend (-23% as compared to the previous week). Across the six WHO regions, over 12 million cases and just under 33 000 deaths were reported. As of 20 March 2022, over 468 million confirmed cases and just over 6 million deaths have been reported globally.
24 Mar 2022	European Centre for Disease Prevention and Control (ECDC)	Weekly COVID-19 Surveillance Report	<i>Situation Report</i>	<ul style="list-style-type: none"> At the end of week 11 2022 (week ending Sunday, 20 March), the epidemiological situation in the EU/EEA was characterised by a continued increase in case rates for the second week in a row, with an overall 14-day case notification rate that increased by 9.6% and a proportionally higher 23% increase among people aged 65 years and above.

Evidence on Drugs

Date	Author/s	Title	Journal/ Article Type	Summary
25 Mar 2022	Bai, et al., (2022)	Enoxaparin augments alpha-1-antitrypsin inhibition of TMPRSS2, a promising drug combination against COVID-19	<i>PubMed/ Experimental study</i>	Detailed molecular modeling was undertaken with the heparin-TMPRSS2-AAT ternary complex. Enoxaparin enhanced AAT inhibition of both TMPRSS2 activity and infection of hAEC with HCoV-229E. Underlying these findings, detailed molecular modeling revealed that: (i) the reactive center loop of AAT adopts an inhibitory-competent conformation compared with the crystal structure of TMPRSS2 bound to an exogenous (nafamostat) or endogenous (HAI-2) TMPRSS2 inhibitor and (ii) negatively-charged heparin bridges adjacent electropositive patches at the TMPRSS2-AAT interface, neutralizing otherwise repulsive forces. In conclusion, enoxaparin enhances AAT inhibition of both TMPRSS2 and coronavirus infection. Such host-directed therapy is less likely to be affected by SARS-CoV-2 mutations. Furthermore, given the known anti-inflammatory activities of both AAT and heparin, this form of treatment may target both the virus and the excessive inflammatory consequences of severe COVID-19.

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	Summary
23 Mar 2022	Moreira, et al., (2022)	Safety and Efficacy of a Third Dose of BNT162b2 Covid-19 Vaccine	<i>The New England Journal of Medicine/ Ongoing randomized phase III clinical trial</i>	A total of 5081 participants received a third BNT162b2 dose and 5044 received placebo. The median interval between dose 2 and dose 3 was 10.8 months in the vaccine group and 10.7 months in the placebo group; the median follow-up was 2.5 months. Local and systemic reactogenicity events from the third dose were generally of low grade. No new safety signals were identified, and no cases of myocarditis or pericarditis were reported. Among the participants without evidence of previous SARS-CoV-2 infection who could be evaluated, Covid-19 with onset at least 7 days after dose 3 was observed in 6 participants in the vaccine group and in 123 participants in the placebo group, which corresponded to a relative vaccine efficacy of 95.3% (95% confidence interval, 89.5 to 98.3).
26 Mar 2022	Guimarães (2022)	Children vaccination as a population strategy to increase COVID-19 vaccine coverage in Brazil	<i>The Lancet/ Commentary</i>	In addition to the individual benefit, the author emphasizes that the more children vaccinated, the greater the protection of the whole population. The urgency, at this moment, is to accelerate the distribution of vaccines to all Federation Units and the strengthening of a collaborative network that provides the necessary clarifications to the population, considering the vacuum created by the absence of campaigns to inform the parents about the individual and collective benefits of vaccination.

Evidence on Equipment and Devices

Date	Author/s	Title	Journal/ Article Type	Summary
25 Mar 2022	Allicock, et al., (2022)	Evaluation of saliva self-collection devices for SARS-CoV-2 diagnostics	<i>PubMed/ Experimental study</i>	<ul style="list-style-type: none"> The authors observed 30 individuals who self-collected saliva using four different collection devices and analyzed their feedback. Two of these devices, a funnel and bulb pipette, were used to evaluate at-home saliva collection by 60 individuals. SARS-CoV-2-spiked saliva samples were subjected to temperature cycles designed to simulate the conditions the samples might be exposed to during the summer and winter seasons and sensitivity of detection was evaluated. All devices enabled the safe, unsupervised self-collection of saliva. The quantity and quality of the samples received were acceptable for SARS-CoV-2 diagnostic testing, as determined by human RNase P detection. There was no significant difference in SARS-CoV-2 nucleocapsid gene (N1) detection between the freshly spiked samples and those incubated with the summer and winter profiles.
25 Mar 2022	Dalili, et al., (2022)	Who is accessing community lateral flow device testing and why? Characteristics and motivations of individuals participating in COVID-19 community testing in two English local authority areas	<i>PubMed/ Observational study</i>	<ul style="list-style-type: none"> Data were collected as part of a service evaluation from December 22nd 2020 until March 15th 2021 for two LAAs. Demographic and postcode data were collected from an online test appointment booking platform and the National Health Service testing service online system, with data accessed from Public Health England. An online survey was sent to individuals who made a testing appointment at an LAA1 site using the online booking platform, consisting of 12 questions to collect data on individual's motivations for and experiences of testing. While national and local COVID-19 testing strategies have evolved, community and personal LFD testing remains a crucial pillar of the testing strategy. Future studies should collect quantitative and qualitative data from residents to most effectively shape testing offers based on the needs and preferences of their population.

Evidence on Traditional Medicine

Date	Author/s	Title	Journal/ Article Type	Summary
25 Mar 2022	Zhang, et al., (2022)	Effects of tai chi and qigong on rehabilitation after COVID-19: a protocol for systematic review and meta-analysis	PubMed/ Systematic Review and Meta-Analysis	COVID-19 is a public health emergency of international concern, which is characterised by rapid and widespread transmission, high mortality and complications. Several studies have shown the benefits of tai chi and qigong for recovery after COVID-19; however, no meta-analysis has been reported. Therefore, the purpose of this study is to evaluate the efficacy and safety of tai chi and/or qigong on rehabilitation after COVID-19 through a systematic review and meta-analysis to provide a reference and basis for clinical application.

Evidence on Preventive & Promotive Health

Date	Author/s	Title	Journal/ Article Type	Summary
22 Mar 2022	Zhang, et al., (2022)	Prevalence of suicidality in clinically stable patients with the major depressive disorder during the COVID-19 pandemic	Elsevier Journal of Affective Disorders/ Cross-sectional, observational study	<p>Altogether, 1718 participants who met the eligibility criteria were included. The overall one-year prevalence of suicidality during the COVID-19 pandemic was 68.04% (95% confidence intervals (CI) =65.84–70.25%), with one-year SI prevalence of 66.4% (95%CI = 64.18%–68.65%), SP prevalence of 36.26% (95%CI = 33.99%–38.54%), and SA prevalence of 39.35% (95%CI = 37.04%–41.66%). Binary logistic regression analyses revealed male gender, married marital status, college education level and above and age were negatively associated with risk of suicidality. Urban residence, unemployed work status, experiences of cyberbullying, a history of suicide among family members or friends, and more severe fatigue, physical pain, and residual depressive symptoms were positively associated with risk of suicidality.</p> <p>Suicidality is common among clinically stable MDD patients during the COVID-19 pandemic. Regular suicide screening and preventive measures on suicide should be provided to clinically stable MDD patients during the pandemic.</p>

Evidence on Transmission

Date	Author/s	Title	Journal/ Article Type	Summary
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Evidence on Medical and Surgical Procedures

Date	Author/s	Title	Journal/ Article Type	Summary
-	-	-	-	-

Evidence on Other Health Technologies

Date	Author/s	Title	Journal/ Article Type	Summary
-	-	-	-	-
