GUIDELINES AND RESEARCH UPDATES

TECHNICAL DOCUMENTS:

D1. Understanding the behavioural and social drivers of vaccine uptake (WHO, 20 May) **[**LINK**]**

- This position paper summarizes the development of new tools and indicators to assess the behavioural and social drivers of vaccine uptake for childhood and COVID-19 vaccination. This paper also reports the main findings from existing systematic reviews and meta-analyses on interventions to improve vaccine uptake.

D2. COVID-19 & mandatory vaccination: Ethical considerations (WHO, 30 May) **[**LINK**]**

- The aim of this document is to identify and articulate salient ethical considerations regarding mandatory vaccinations against COVID-19. This document updates a policy brief initially published in April 2021 in response to changes in the COVID-19 vaccine landscape, including authorization of vaccines for children and additional information about, and experiences with, vaccination mandates for COVID-19.

D3. Interim recommendations for the use of the Janssen Ad26.COV2.S (COVID-19) vaccine (WHO, 6 June) **[**LINK**]**

- This document contains WHO interim recommendations on the use of the Janssen Ad26.COV2.S (COVID-19) vaccine developed on the basis of advice issued by the Strategic Advisory Group of Experts on Immunization (SAGE) and the evidence summary included in the background document.

D4. Maintaining infection prevention and control measures for COVID-19 in health care facilities: Policy brief (WHO, 7 June) **[**LINK**]**

- This document aims to encourage countries to develop and implement policies to maintain and strengthen IPC programmes and measures in health care facilities in the context of the current ongoing transmission of the SARS-CoV-2, with recognition that epidemiological trends may vary and the risk of transmission of other pathogens.

D5. Severity of disease associated with Omicron variant as compared with Delta variant in hospitalized patients with suspected or confirmed SARS-CoV-2 infection (WHO, 7 June) [LINK]

- This document describes the demographics, clinical severity and outcomes for patients infected during the Omicron variant period as compared to the Delta period.

D6. Role of the polio network in COVID-19 vaccine delivery and essential immunization, Lessons learned for successful transition (WHO, 7 June) [LINK]

- This document highlights the historic contributions of polio workers to global health and their frontline response to the pandemic response and immunization recovery efforts, including the massive endeavor to deliver COVID-19 vaccines. It also outlines support of polio workers in areas ranging from coordination and training to data management and community engagement has reiterated their value as an agile and experienced public health workforce able to pivot to support national health programmes.

D7. Technical guidance for antigenic SARS-CoV-2 monitoring (European Centre for Disease Prevention and Control, 7 June) [LINK]

- This document helps in making decisions on establishing or scaling up capability and capacity to isolate and antigenically characterize circulating SARS-CoV-2 variants, and which methods to use. The objective of this document is to provide guidance on sampling for virus characterization, and present available methods for isolation and antigenic characterization of circulating SARS-CoV-2 viruses.

JOURNAL ARTICLES

J1. Effects of Previous Infection and Vaccination on Symptomatic Omicron Infections (NEJM, 15 June) [LINK]

- The authors conducted a case–control study in Qatar to evaluate the effectiveness of vaccination with BNT162b2 (Pfizer–BioNTech) or mRNA-1273 (Moderna), natural immunity due to previous infection with variants other than omicron, and hybrid immunity against symptomatic omicron infection and against severe, critical, or fatal Covid-19. The study did not observe any discernable differences in protection against symptomatic BA.1 and BA.2 infection were seen with previous infection, vaccination, and hybrid immunity. Vaccination enhanced protection among persons who had had a previous infection. Hybrid immunity resulting from previous infection and recent booster vaccination conferred the strongest protection.

J2. Protection and Waning of Natural and Hybrid Immunity to SARS-CoV-2 (NEJM, 9 June) [LINK]

- Authors collected data of all persons who had been previously infected with SARS-CoV-2 or who had received coronavirus 2019 vaccine. They conclude that among persons who had been previously infected with SARS-CoV-2 (regardless of their vaccination status), protection against reinfection decreased as the time increased since the last immunity-conferring event; however, this protection was higher than that conferred after the same time had elapsed since receipt of a second dose of vaccine among previously uninfected persons. A single dose of vaccine after infection reinforced protection against reinfection.

J3. Effectiveness of heterologous and homologous covid-19 vaccine regimens: living systematic review with network meta-analysis (British Medical Journal, 31 May) [LINK]

- The study evaluated the effectiveness of heterologous and homologous covid-19 vaccine regimens with and without boosting in preventing COVID-19 related infection, hospital admission, and death. The study concludes that an mRNA booster is recommended to supplement any primary vaccine course. Heterologous and homologous three dose regimens work comparably well in preventing covid-19 infections, even against different variants.

J4. Effect of Awake Prone Positioning on Endotracheal Intubation in Patients With COVID-19 and Acute Respiratory Failure: A Randomized Clinical Trial (JAMA Network, 15 May) [LINK]

- The study evaluated the efficacy and adverse events of prone positioning in non-intubated adult patients with acute hypoxemia and COVID-19. The findings demonstrate that in patients with acute hypoxemic respiratory failure from COVID-19, prone positioning, compared with usual care without prone positioning, did not significantly reduce endotracheal intubation at 30 days.

J5. Impact of stringent non-pharmaceutical interventions (NPIs) applied during the second and third COVID-19 epidemic waves in Portugal, 9 November 2020 to 10 February 2021: an ecological study (Eurosurveillance, 9 June) [LINK]

- This study evaluated the impact of tiered NPIs and nationwide lockdown applied in Portugal during the second and third epidemic waves in reducing the incidence of COVID-19. The findings indicate a likely effect of tiered NPIs in reverting a rise in COVID-19 incidence; however, this effect resulted in only a modest declining trend. A lockdown without school closure seems to be effective in slowing transmission, but the addition of school closure is likely to provide the strongest effect in reducing COVID-19 incidence, thus reducing pressure on health services.

J6. Which hospital workers do (not) want the jab? Behavioral correlates of COVID-19 vaccine willingness among employees of Swiss hospitals (PLOS ONE, 26 May) [LINK]

- The study examines the vaccine-hesitant hospital employees, such as doctors, nurses and other employees who provide indirect care and services (e.g., technical support, sanitation specialists). The findings suggest that vaccine-hesitant hospital employees are less likely to perceive vaccination as the prevailing social norm. The study offers actionable policy implications for tailoring public-health communications to vaccine-hesitant hospital employees.

J7. Health outcomes in people 2 years after surviving hospitalisation with COVID-19: a longitudinal cohort study (Lancet, 11 May) [LINK]

- This is an ambidirectional, longitudinal cohort study of individuals who had survived hospitalisation with COVID-19 and who had been discharged from Jin Yin-tan Hospital (Wuhan, China) between Jan 7 and May 29, 2020. The study concludes that Regardless of initial disease severity, COVID-19 survivors had longitudinal improvements in physical and mental health, with most returning to their original work within 2 years; however, the burden of symptomatic sequelae remained fairly high. COVID-19 survivors had a remarkably lower health status than the general population at 2 years. The study findings indicate that there is an urgent need to explore the pathogenesis of long COVID and develop effective interventions to reduce the risk of long COVID.